TOWN COUNCIL OFFICE

45 South Main Street, Room 220 Wallingford, CT 06492 Phone - 203-294-2155 Fax - 203-294-0180

MEMORANDUM

TO:

Town Council

FROM:

Sandy Weekes

CC:

Mayor, Law, Finance, Town Clerk

DATE:

July 16, 2009

REGARDING:

June 23, 2009 Minutes

The June 23, 2009 Town Council minutes will be part of the agenda for acceptance at the August 11, 2009 Town Council meeting. Therefore, the copy of the 6/23/09 minutes that you now have may be discarded in its entirety, including the appendices. Please use the attached minutes for your records.

Thank you.

TOWN OF WALLINGFORD, CONNECTICUT REGULAR TOWN COUNCIL MEETING Town Council Chambers

June 23, 2009

The following minutes are a record of the Regular Meeting of the Wallingford Town Council held in the Robert Earley Auditorium of the Wallingford Town Hall on Tuesday, June 23, 2009. The Meeting was Called to Order at 6:38 P.M. Responding present to the Roll Call given by Town Council Secretary Sandra Weekes were Councilors Mike Brodinsky, Vincenzo M. DiNatale, Nick Economopoulos, Jerry Farrell, Jr., John LeTourneau, Robert F. Parisi, Rosemary Rascati, Michael Spiteri and Vincent F. Testa, Jr. Mayor William W. Dickinson, Jr., and Comptroller James Bowes were also present. Town Attorney Janis Small arrived after the presentation of the sports certificates at approximately 7:10 P.m.

The meeting began with a Moment of Silence, the Pledge of Allegiance and the Roll Call.

1. Presentation of Certificates to 70 Teammates and Coaches of the James H. Moran Middle School Track and Field Team – Mayor

Mayor William W. Dickinson, Jr. and Town Council Chairman Mike Brodinsky presented certificates of recognition and congratulations to all team members, managers and coaches of the James H. Moran Middle School Track and Field Team. (Appendix I)

Following the presentation of the sports certificates, there was a twelve minute recess from 7:03 P.M. to 7:15 P.M.

- 2. Chairman Brodinsky announced that the Town Engineer has submitted a report on Phase 3 for the Quinnipiac River Linear Trail along with the most recent newsletter of the Quinnipiac River Linear Trail Advisory Committee, which reports the location, currently undisclosed, and identification of an extremely, unusual plant on the trail, called the *Mermaidicus quinnipidensus*.
- Consent Agenda
 - 3a. Consider and Approve Tax Refunds (#667 #672) totaling \$816.09 Acct. # 001-1000-010-1170 - Tax Collector
 - 3b. Approve correction to Page 3 of May 26, 2009 Town Council Minutes.
 - 3c. Consider and Approve a Transfer in the Amount of \$10,000 to Injuries & Damages Acct # 431-8920-925 from Administrative & General Salaries Acct # 431-8920-920 Water Division
 - 3d. Consider and Approve an Appropriation in the Amount of \$5,896 FY 2009-2010
 Preventative Health Services Block Grant to Grant Expenditures Acct # 224-3010-605-6000 to State Grant Acct # 224-1040-050-5000 Health Department

- 3e. Consider and Approve a Transfer in the Amount of \$41,402 to Self Insurance Workers' Compensation Acct # 001-1602-800-8310 as follows from:

 \$9,425 Property Casualty-General Government Acct # 001-1603-800-8250
 \$16,456 Property Casualty BOE Acct # 001-1603-800-8260
 \$8,121 Hypertension Police Acct # 001-1602-800-8400
 \$7,400 Hypertension Fire Acct # 001-1602-800-8410
 Personnel
- 3f. Consider and Approve an Appropriation in the Amount of \$15,833 to LOCIP 08/09

 Revenue Acct # 205-1040-050-5000 and to LOCIP 08/09 Expenditures Acct # 205-5015-611-6500 Program Planning
- 3g. Consider and approve a Resolution authorizing the Mayor to submit on behalf of the Town of Wallingford an application for the Connecticut Local Pass-Through Justice Assistance Grant in the Amount of \$30,000 to the State of Connecticut, Office of Policy Management (OPM) for financial assistance from the Connecticut Local Justice Assistance Grant (JAG) to provide such additional information and to execute such other documents as may be required and to act as the authorized representative of the Town of Wallingford Police Chief
- 3h. Approve Minutes of Regular Town Council Meeting April 21, 2009
- 3i. Approve Minutes of Regular Town Council Meeting June 9, 2009

Mr. Testa made a motion to approve Consent Agenda Items 3a. to 3i. Mr. Farrell seconded. All Councilors present (9) by voice voted Aye. The motion passed.

4. Items Removed from the Consent Agenda

None

WAIVE RULE V

Mr. Testa made a motion to Waive Rule V for the purposes of taking up a transfer submitted by the Grants Administrator for \$1,500. The motion was seconded by Mr. Farrell. All Councilors present voted Aye. The motion passed.

Mr. Testa made a motion to Consider and Approve a Transfer in the Amount of \$1,500 to Production Equipment Account 001-1303-999-9910 from Maintenance of Equipment Acct 001-1303-570-5200 as requested by the Grants Administrator. In the memo to the Mayor, Mr. Roe explains that the low bid exceeds the available funds by \$1,500 for replacement equipment for Government Access Television that is used for production and distribution.

All Councilors present (9) by voice voted Aye. The motion passed.

5. PUBLIC QUESTION & ANSWER

Robert Gross, 114 Long Hill Road, was concerned about jobs that are not being filled in town with regard to public safety.

Lucille Trzcinski, 25 Turnberry Lane, asked if the Charter Revision item could be moved before the Executive Session items on the agenda. Chairman Brodinsky complied with this request.

6. 7:00 P.M. Public Hearing Neighborhood Assistance Act

The Public Hearing for the Neighborhood Assistance Act convened at 7:25 P.M.

Mr. Roe briefly explained the annual program and read the names of the applicants, their projects and the amounts for which they have applied as follows:

8	Gaylord Hospital, Inc. Patient Programs & Services	\$150,000
€	Master's Manna, Inc. General Operating Expenses	\$50,000
•	Master's Manna, Inc. Safety Net Expansion	\$24,000
9	Meriden/Wallingford Substance Abuse Council Early Childhood Drug Prevention (B.A.B.E.S.)	\$5,000
6	Meriden/Wallingford Crysalis, Inc. Domestic Violence Residential Services	\$ 24,786
	Mid-State Medical Center 2009 Annual Appeal	\$150,000
•	Multicultural Leadership Institute Multicultural & Diversity Leadership Training	\$150,000
•	Ulbrich Boys & Girls Club Youth Development	\$150,000
•	Wallingford Housing Authority Moderate Rental Renovations	\$100,000

Mr. Testa said that just to clarify that this has nothing to do with public funds from the town that this means it is the extent that private businesses can receive tax credits from the state for dollars that they donate to these organizations. Mr. Roe said that this is correct.

There were no questions or comments from the Council or from the public. Chairman Brodinsky closed the Public Hearing at 7:28 P.M.

7. Consider and Approve a Resolution authorizing the Mayor to submit to the Department of Revenue Services the approved Neighborhood Assistance list of programs eligible for investment by business firms and to provide such additional information, to execute such other documents as may be required by the Department, to accept on behalf of the Town any funds available for those municipal programs on the list, to execute any amendments, rescissions, and revisions thereto, and to act as the authorized representative of the Town of Wallingford – Program Planning

Mr. Testa made a motion to approve authorizing the Mayor to submit to the Department of Revenue Services the approved Neighborhood Assistance list of programs eligible for investment by business firms and to provide such additional information, to execute such other documents as may be required by the Department, to accept on behalf of the Town any funds available for those municipal programs on the list, to execute any amendments, rescissions, and revisions thereto, and to act as the authorized representative of the Town of Wallingford.

Mr. Farrell seconded.

All Councilors present (9) by voice voted aye.

The motion passed.

8. Acceptance of deeds for highway purposes for the following:

6,366 sq. ft along Powers Road from Edward and Helen Klebieka

13,066 sq. ft. abutting Cook Hill Road and Tuttle Avenue

1,937 sq. ft. Northfield Road

2,800 sq. ft High Hill Road from Fulton Forbes

Planning & Zoning

Mr. Testa made a motion to approve Acceptance of deeds for highway purposes for the following:

6,366 sq. ft along Powers Road from Edward and Helen Klebieka

13,066 sq. ft. abutting Cook Hill Road and Tuttle Avenue

1,937 sq. ft. Northfield Road

2,800 sq. ft High Hill Road from Fulton Forbes

Mr. Farrell seconded.

All Councilors present (9) by voice voted aye.

The motion passed.

9. Presentation of 2010 Revaluation – Comptroller/Assessor

In Attendance:

James Bowes, Comptroller Shelby Jackson, Assessor Dennis Hlavac, Chief Appraiser Mr. Bowes and Mr. Jackson said that the next revaluation is in 2010 and will be a full physical revaluation for residential, industrial and commercial properties. Mr. Jackson said that the purpose of the revaluation is to establish a new market value. The field work will be conducted by Vision Appraisal Technology, a top appraisal company, who will for residential properties take approximately five to ten minutes for their study of the property, noting things like the number of rooms. He said the town is divided into regions, that residents in each section will be notified and that the assessor's office will be monitoring the field process and the field teams as it occurs. He said that it will take 8 to 10 months to complete, when it will be mailed to the homeowner. He reviewed the hearing system and how it will work in order to make corrections in the review the information. Final notices will be set in 2011.

Mr. Farrell said that some of his constituents have asked about banks stopping the use of home equity loans.

Mr. DiNatale inquired about monitoring sales that are being recorded in the Town Clerk's Office. Mr. Jackson said that they are now looking at the data and verifying sales.

Mr. LeTourneau inquired if the cost of Vision's services included postage for mailings to residents. It does and is a complete package.

In response to Mr. Parisi, Mr. Jackson reviewed the process of what happens if Vision calls upon a resident, and no one is home.

Bob Gross, 114 Long Hill Road, asked if this information will be available online. Mr. Bowes said no.

Diana Hotchkiss, 38 Clifton Street, asked about appraised values of the properties at Choate and how many there were. Mr. Jackson said that as part of this project, Vision will be required to review properties owned by Choate, taxable or not. He said that they will be treated like every other property in town; they will be visited and inspected both the interior and the exterior and that a new market value will be established for every one of those properties as of October 2010. He said that under Connecticut law educational institutions are not subject to property tax.

10. Consider and Approve an Appropriation in the Amount of \$150,000 to Conservation Expenses Acet # 909 from Retained Earnings – Electric Division

George Adair, Director, Public Utilities Richard Hendershot, General Manager, Electric Division Tom Sullivan, Business Manager, Electric Division

Mr. Testa made a motion to approve an Appropriation in the Amount of \$150,000 to Conservation Expenses Acct # 909 from Retained Earnings. Mr. Farrell seconded.

Mr. Hendershot said that by state statute the Electric Division is required to collect energy conservation and load management funds and then spend those funds on approved programs to enable all of our classes of customers to reduce their electric consumption and therefore their bills. He said that the current situation is that although they have \$298,000 left in that account in their budget for this fiscal year, CMEEC, the state-wide entity for municipal electric systems and the

clearing house of all of the financial transactions of all of the systems for this source of activities have not processed any of the activities since January 1st. He said that they recently sent the information on the activities and needs for energy conservation and load management through April and that total is slightly over \$300,000, and they have two more months of activities to fund.

Historically, in earlier years, when they began collecting these funds in 2006, he said they didn't spend everything that they collected, so the money was 'warehoused' at CMEEC and on the Electric Division's books it became 'Retained Earnings,' because it was income that wasn't spent. He said it can only be spent on these activities, and this is the first fiscal year where the activities of the programs will exceed what has been collected, so it's time to use the \$300,000 surplus that resides at CMEEC to move that cash into our organization to fund the activities on the Electric Division books that is a transfer from Retained Earnings to the 909 account. An Example of an activity is the home energy savings program, the audit, which can cost the division between \$250 and \$600 depending on what is involved with a customer; many 4 and 5 figure energy improvement projects at commercial and industrial customers; lighting retrofits, large motor and pump change outs, all of this has large paybacks for these customers that are well below the five-year threshold that we require before we approve a project. He said that they estimate that they have reduced energy consumption across the entire system by at least five percent (5%).

There were questions regarding the flow of money with CMEEC with regard to the understanding of that flow of that money and how that money is used in regard to the activities in consideration to the Charter and Council approval. Business Manager, Tom Sullivan, explained about the CMEEC monthly statements that are at least one month behind. Mr. Hendershot explained the legislation that established that the municipalities had to participate in Energy Conservation and Load Management Activities also changes CMEEC to be the central overseer and reporting authority for all of the municipal systems. The state didn't want to receive six or seven separate statements for an amalgamation of electric systems that represent only six percent (6%) of the state's electric load, so it's all centralized at CMEEC. He said it is an advantage to have CMEEC staff people who work to support these efforts and who are shared among all of the municipalities. Otherwise, he said we would need to add staff to do this type of work. This work included program development, marketing, engineering, analysis, measurement verification reporting and so on. He said that annual collection varies by calendar year and fiscal year. In calendar 2009, the collection will be \$.19 per kwh about \$1 million per calendar year and \$1.2 million in the next fiscal year. CMEEC uses less than ten percent (10%) for about \$100,000 for an allocation of actual time for personnel on energy conservation activities. The unexpended balance earns interest. Mr. Parisi was interested to know if anyone is tracking the interest and that he is interested in meeting with the Electric Division for more information. CMEEC only does what we ask them to do.

All Councilors present (9) by voice voted aye.

The motion passed.

11. Consider and Approve a Budget Amendment in the Amount of \$80,000 FY 2009-2010 to Structures & Improvements – General Plant Acct # 433-9012-390 from Appropriation from the Major Capital Replacement Funds - Water Division

Mr. Testa made a motion to Approve a Budget Amendment in the Amount of \$80,000 for FY 2009-2010 to Structures & Improvements — General Plant Acct # 433-9012-390 from

Appropriation from the Major Capital Replacement Funds as requested by the Water Division. Mr. Farrell seconded.

George Adair, Director, Public Utilities Roger Dann, General Manager, Water Division

Mr. Dann reviewed the project for the Council stating that in the 2006-2007 budget year, they appropriated funds to replace the roof on the garage, a building that dates to the mid-50s and is a metal frame structure. They have maintained and repaired the building many times but the leaking is persistent. He said a recent report of a structural engineer indicated that to meet current loading requirements significant structural modifications needed to be performed. The conclusion of that initial study was that the cost of the required modifications would likely exceed the value of replacing the structure outright. Earlier this fiscal year with Council approval, they hired an engineer to look at alternatives to replacing the structure, and that work was performed and presented to the Public Utilities Commission in January 2009. Mr. Dann said that several alternatives were reviewed, and on the basis of the preferred alternative of the Commission, this was followed with a bid process for architectural services for design, and ultimately construction of the replacement facility. Bids have been received, and they know the value of the architectural services, and that is why they are before the Council for the amendment this evening. He said that if the project goes forward, and at the time the construction cost is fully determined on the basis of a bid that they expect to return to the Council for funding for the construction phase of the work. He said that the source of funds is a Major Capital Replacement Fund that has been accumulating over an eleven-year period. He said that it was set up and designed specifically to allow us to perform this type major facility improvement, whether it be a pump station, a water tank or that type of capital replacement utilizing cast that we had saved over time rather than each of those projects to be bonded with its associated impacts to the rates. This is consistent with the intent of that fund. It has been accumulating for nearly eleven (11) years.

Mr. Testa stated for clarification purposes that this is money that you have as a portion of your retained earnings, so to speak, a special fund designed for this purpose, that you have the money for this; that this is bookkeeping and accounting activity that you are trying to do today. Mr. Dann said that that is correct, and added, each year you would see, if you look at our budget, that there is an appropriation to the Major Capital Replacement Fund, and then, periodically on an as needed basis, we would come to the Council to appropriate money from that reserve for the intended purpose.

Mr. LeTourneau asked about the anticipated coast of the garage. Mr. Dann said hesitantly, since the estimate is base only on preliminary design on the selected alternate that the cost estimate is \$2.1 million. Mr. Dann said that by proceeding at this time that they can take advantage of the opportunity of favorable pricing in the market, 10% to 15% lower. Mr. Dann said that using the word 'garage' is a misnomer and then described the building, which houses vehicles for operation, locker facilities, lunchroom facilities, metering facilities, office space, and training space. He said that the alternate that is being pursued would replace the garage which is right along John Street and has a masonry side with a metal roof with the same footprint or smaller. He continued stating that at the back of the yard there is a pole barn that is used material storage that is also in need of replacement and that would be replaced and expanded to house two more bays for vehicle storage. Mr. LeTourneau wanted to know how critical it was that it be done at this time. Mr. Dann said that the study that was performed did not indicate that there was an imminent failure of the structure but that it indicated is that it is deficient with respect to current loads so that does give them some concern and this is a structure that houses critical equipment. He said that if we were to lose this

structure due to a hurricane or excessive snow load and then forced into simultaneous response that would not be a good thing. It is a critical building for us. Could we patch it through two more years? We could possibly do that but at the end of the day, we have to replace it because it has reached the end of its intended life, so he is not sure what is gained by deferring it for a couple of years. He said that the funds have been set aside for capital replacement projects such as this so if they are not used for this project, they will sit and accumulate for this project or another. He sees an advantage to doing this at this time for favorable pricing.

Ben Martin, Ward Street, member Energy Conservation Commission, asked about using energy efficient systems in the new structure. Mr. Dann said that they are considering solar panels and more efficient HVAC systems. Mr. Martin asked about LEED and government grants that might be available.

Mr. Dann said that they have participated in energy efficient lighting.

Mr. LeTourneau asked to see the architectural plans of the building even in a meeting before voting on the funding for the construction phase of the project.

All Councilors present (9) by voice voted aye.

The motion passed.

12. Discussion and Possible Action regarding a request from Choate Rosemary Hall for the closure of Old Durham Road to vehicular traffic from East Main Street to Christian Street – Chairman Mike Brodinsky

Chairman Brodinsky stated that he thought that it was appropriate before we get into this discussion to get into some procedural context as to what is going on and how things may unfold. There will not be a vote on the merits, as far as he knows, tonight and that that could be months off. He said that he really doesn't know. He said that before there is any decision made on what to do about Choate possibly taking over the rights to Old Durham Road, there would have to be a Public Hearing and that means publication in the newspaper and as of yet there are no plans to set a date to do that, so there are some procedural steps to do that. He said that he believes there is a time delay required by statute in between the time that any vote is made, if any vote is made, to the time that the actual transfer of the road is made. He said that he understands the actual time is eight months. He said that there is an appraisal of the road in process.

Town Attorney, Janis Small, said that there is an eight-month appeal period if you voted to discontinue. It would be something that you would refer to Planning and Zoning, and you would have your Public Hearing.

Jason Zandri, 35 Lincoln Drive, asked when the Council would vote. Chairman Brodinsky said when the Council is ready and that he just does not know. Mr. Zandri and Chairman Brodinsky briefly discussed the appeal process. Attorney Small said that the procedure for discontinuing a road is a statutory procedure, and it provides the remedies if you are not satisfied with the decision. In all likelihood, it would trump all referendum procedure but that she would have to take a look at it.

RECESS

Chairman Brodinsky announced a five-minute recess.

13. Presentation by Choate Rosemary Hall of its plans for development and its request to close Old Durham Road – Mayor

Mr. Edward Shanahan, Headmaster Choate Rosemary Hall

Mr. Shanahan began his presentation by giving his background as Dean of Students at Wesleyan University, followed by Dean of Dartmouth College, and for the last eighteen years as Headmaster of Choate Rosemary Hall. He told of his affection, and that of his family, for the Town of Wallingford. He thanked the Town Council and all of those in the audience for coming to express their views tonight about an item that he thinks is very exciting from an educational point of view. He said that his passion is to do everything that he can to educate young people and perhaps through them to educate adults to make a difference in their own personal lives in the towns in which they are going to live in our nation and around the globe. He said that he thinks that our republic demands that. Our school is devoted to educational excellence.

With respect to various statistics about Choate Rosemary Hall, Mr. Shanahan listed the following for the Town Council:

300 employees of Wallingford natives

\$15 million payroll

3,000 visitors come to Wallingford

1,000 visiting families

850 students

40 states represented

30 countries represented

30% student body on significant financial aid

54 students from Wallingford, a 5-year average

50% of students from Wallingford are on financial aid at \$2.5 million

Mr. Shanahan posed a question asking what is the school is looking for from the town, and why, and what is the school proposing in exchange for what we are asking. He said that it is the opportunity to close a portion of Old Durham Road, a road that is currently owned by Choate Rosemary Hall. He said that they have done a title search on the road, and the road is owned by the school. He said that it is his understanding that even a privately owned road, after a period of fifteen years of public access to the road, there is an assumed easement that the public has over that road, so what we (the school) are asking is a lifting of that easement, so that we can close the road because it runs along a phenomenal, four-season stream bed that is alive in terms of the ecosystems of that area. He said that it is the intention of the Choate Rosemary Hall to use this as part of the 260 acres, a fairly good amount, of the study area that we are expecting our students to engage in for study. The road is a winding road with blind spots. It is a dangerous road particularly if two cars are passing each other. He cited police reports documenting 4 or 5 times more accidents on Old Durham Road and at the end of Old Durham Road than there are at the end of East Main Street or Christian Street. He said that he believes that closing the road would create minimal disruption to traffic pattern. He said that he understands that it is an inconvenience and that change is difficult and that we like what we have but the option is a safer on the route going down East Main Street.

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He tested the route himself; he timed it; he determined it took 20 seconds longer by not taking Old Durham Road. He asked people to acknowledge the inconvenience, and then, to ask about the benefits – educational benefits, residential benefits, town benefits – to justify that inconvenience. He said that he thinks that there are many benefits. Mr. Shanahan referred to his visual aids.

10

In establishing this Environmental Center, it is in effect creating well over 200 acres of open space within the Town of Wallingford, our Central Park. Over the last several years, the town has paid \$25,000 per acre for open space, and when applied to the 260 acres, this is well over \$6 million. If it is only applied to the acreage east of East Main Street, it is over \$4 million.

He said that the school would be creating a leading-edge Environmental Center with opportunity for educating local students as well as Choate students. He said that he has had conversations with high school principals, with the head of vocational agricultural school, with the new superintendent, with town department heads, and he thinks they are excited about the opportunities that are available to work together to benefit everybody in this town.

Continuing with the benefits, it preserves the ecosystem in perpetuity. It establishes Wallingford as a center for environmental studies in this area. It improves safety, if that road is closed. It will save the town about \$250,000, if the road is closed, and \$6,000 of annual operating expenses. The town would have 262 acres of open space at no cost to the town.

Mr. Shanahan referred to the large map displaying approximately 450 acres of Choate properties with 130 buildings of which 60 are faculty homes. The entire campus is about 1 million square feet.

Specifics of the Environmental Center can be reviewed in (Appendix II). Appendix II is the binder handout and was part of the presentation by Mr. Shanahan. It includes:

The Executive Summary

Traffic Study by Milone and MacBroom (without maps)

Program Development Section

Sample Environmental Center Design

Town Benefits

Photo Section of Old Durham Road

Correspondence - David Foster, Harvard Forest,

Science & Conservation Infrastructure for an Environmental Laboratory

Mr. Farrell asked about student safety in traversing East Main Street. Mr. Shanahan said that most of the activity will take place east of where Choate proposes to have the Environmental Center as there is ample biodiversity on that acreage, including a river that runs under East Main Street. Mr. LeTourneau asked for clarification regarding road ownership. Attorney Small said that the title is under review by the town. Mr. Parisi asked about cost of the environmental programs to Wallingford students. Mr. Shanahan said that there is no cost to Wallingford students. Mr. Economopoulos commented on this worthwhile educational program. He said that Choate is very prestigious and wealthy in the value of its buildings, real estate and in its endowment. He commented that he personally does not want to fight the tax laws because he feels that educational institutions should not pay property tax. He said Choate pays about \$16,000 property tax annually. He paraphrased Mr. Shanahan by saying that Mr. Shanahan said that if there was a time where there could be a win-win situation that he would like to hear of it. Mr. Economopoulos said then this is the time. Mr. Economopoulos said that it takes six acres of land to produce and have four Little League fields. He asked Mr. Shanahan, "Could you find six acres of land

and build four Little League fields for this town as part of this project?" He said that is a real question. Mr. Shanahan said that is certainly worth our talking about to be sure. He said that he was involved in Wallingford's Little League activities for the girls' fields several years ago. Mr. Economopoulos said that he is not expecting Choate to build the fields but rather he is saying that Choate provide the land, and then let Little League do what they do best in raising money for a first-rate facility and something that fits with the prestige of Choate. Mr. Spiteri was interested in what Choate paid for the land. Mr. Shanahan said that land was purchased as land became available over a period of 20-30 years. Mr. Shanahan said the project, when complete, will be about \$6 to \$8 million with a building that is 18,000 to 19,000 square feet. The school is not aware of any grants but the architect thinks that there may be some public help for the project. Mr. Spiteri wanted clarification for what "open space forever" means if something happens to Choate. Mr. Shanahan said that the individuals who are prepared to financially support the project would make that as a condition for their support, i.e. a condition for building this building and initiating this program, that Choate will commit to these donors that it, Choate Rosemary Hall, will never sell that land for commercial purposes.

Craig Fishbein, Grieb Road, is concerned about losing his shortcut.

Resident, 974 Old Durham Road, stated that the program is a great asset to the town.

Resident, 866 Durham Road, loves the idea, comes from a family of farmers and wants to see the land stay this way.

Resident, 12 Perkins Drive, testified as to the beauty of this part of town, thinks traffic reports are hypothetical.

Mr. Shanahan gave some short responses, including that the traffic reports were actual traffic reports, and not hypothetical.

Eve Gold, 9 Pine Glen Terrace, stated that this is a marvelous opportunity for Choate and possibly for the town; she spoke of flooding causing sewer problems, a bridge for students over East Main Street, and the use of Old Durham Road by emergency vehicles.

Julius Gold, 9 Pine Glen Terrace, worried that accidents will just move over one street.

Louis Pontecorvo, 26 Pine Glen Terrace, uses Old Durham road every day, wants lots of thought before deciding to close this road.

Ken Daly, 594 North Elm Street, said that open space has a specific definition and said that the town should have a conservation easement and not give up domain over the land while you are using it.

Mary Beth Applegate, 1 Perkins Drive, uses this road everyday but in weighing the advantages for youth in town and at Choate, she favors spending the extra 20 seconds to using and preserving the land. She asked if a walking path for residents could be constructed.

Bill Spence, 126 Mapleview, opposed to closing road, uses this viable road everyday.

Teacher at Choate, 20 Rolling Meadow Drive, asked look at the bigger picture and not just at the closing of Old Durham Road

Robert Gross, 114 Long Hill Road, asked about other projects that might be built on this property.

William Lavorgne stated his opinions.

Robert Sheehan, 11 Cooper Avenue, asked why close the road; they never fix the road, they never plow it, now they say they own it. Don't close the road.

Sharon Sanders, South Cherry Street, Fire Department uses Old Durham Road; now what happens.

Mr. Shanahan said that he respects all of the points of views that were expressed. He gave some responses to resident comments saying that there will be a path along that road and townspeople are welcome on Choate property. He said that many walk there all the time. He said that he hails the people he meets when he is out walking, which he does frequently; however, he said that ATVs are *not* welcome because of the damage that is done to the land. He said that the Wallingford Conservation Commission has a range of categories of open space, and it certainly includes space on which buildings can be put, for example, the definition of open space in one category includes places like parks, playgrounds, ball fields, golf courses, beaches and trails, so there is no single, absolutist definition of open space.

He said that he is as certain as he is sitting there that if this Environmental Center goes through and that if the road is closed that that land is never going to be sold off, or commercially developed, and he said, "I will say here, and it can go into the deed, if it is ever sold off, two things, the town will have the right of first refusal on that land, and secondly, you can write it into the deed that that road will be brought up to town standards and given back to the town, complete reversal. We back off on our agreement, and you get the road back, improved by \$250,000 at current expense. The issue of emergency vehicles is one, I think, we need to think about, and assess, and that is one of the reasons that I wanted to meet with the Fire Department and the Police Department." He said that their initial assessment was that there wasn't a real safety issue there but he thinks that the town needs to take a look at that issue.

Ben Martin, Ward Street, supports proposal completely, glad townspeople are welcome on the Choate campus. He enjoys walking his dog there.

Wes Lubee, impressed, and said never sell for commercial purposes.

Diana Hotchkiss, 38 Clifton Street, made comments regarding taxes with respect to Choate Rosemary Hall.

Jason Zandri, 35 Lincoln Drive, was happy to hear Mr. Shanahan's comments with respect to the use of Choate land by residents.

Mr. Shanahan spoke about the three, very large 501(c)(3) enterprises that are in Wallingford, namely Masonic Home, Gaylord Hospital and Choate Rosemary Hall and in addition every church and synagogue are 501(c)(3)s. He said that if you add up all of the 501(c)(3) acreage outside Choate Rosemary Hall that Choate Rosemary Hall would be on the short-end of the acreage. Educational institutions offer something to the town. Choate Rosemary Hall is an open community. He emphasized that this is our culture. He said it is unlike other schools with which he is familiar.

He said that Choate's students give of themselves and are in the community everyday as teachers of swimming, as teachers of special populations in skating, in a Big Brother/Big Sister Program that is one of the largest in the country, as Moses Y tutors. He said there is the Paul Mellon Arts Center where the Wallingford Symphony Orchestra is domiciled for free. He questioned if the school could give more to the community and said that that is probably a reasonable question for anyone to ask.

Jim Vitali, North Elm Street, Chairman, Inland Wetlands Commission, stated that all programs related environmental issues are important, and he envisions this program as being able to give students a head start.

Attorney E. James Loughlin, High Street, Counsel for Choate Rosemary Hall in the matter, offered comments regarding Inland Wetlands, the title to the road, open space versus development density in this area as a comparison for people to ponder.

Mr. Economopoulos and Mr. Testa made final comments that could lead into further discussions. Chairman Brodinsky said that he has a lot of questions and concerns but will defer them to another time. The subject will be taken up and continued at another meeting. No date was entertained.

Mr. Shanahan asked for some direction as to next steps. Chairman Brodinsky said that he couldn't do that now. Attorney Loughlin said that this is a process as outlined by statute, and it requires a referral to the Planning and Zoning Commission and a second meeting here. Chairman Brodinsky said that it requires a Public Hearing, and if something is going to be done, a referral to Planning and Zoning can be done. Attorney Loughlin said the agenda did talk about possible action on this matter. Chairman Brodinsky said that that was Agenda Item 12 when the context of this issue was discussed as to what we are doing and why, and the steps that may lie ahead. He said as far as committing to a next step or guidance, he doesn't think we are in a position to do that. Attorney Loughlin said that he would just ask the Council and Chairman Brodinsky for the referral now so that we can move the ball along.

Chairman Brodinsky said, "No, I don't think that there is anything that we can do." Chairman Brodinsky said if you want, we can go back, if you want, and open number 12, and refer it to Planning and Zoning, and to do that indicates that you know what you are going to do and that you are recommending a transfer. He said that he is strongly against it but if you want to go back and do that, fine. Very unwise in his opinion. He said that he does not think we should be rushed and he does not think that P & Z should be rushed. There is no rush. This requires due deliberation and a step by step process, and he does not want to jump steps.

Attorney Loughlin said that he wants to make sure that the statute is understood. The case law, which Attorney Loughlin has read, dates back to the 1800s. The referral to Planning and Zoning is for the purposes of a report and that report will come back to you...

Chairman Brodinsky said that he is ready to close this agenda item and said we can bring this up at subsequent meetings but that he is not in a position to recommend to his colleagues that we do anything further than digest what we have heard and that we will take it up in an orderly process at some point in the future.

14. Consider and Approve a Quit Claim Deed of Wallingford Historic Preservation Trust to property known as 1211 Barnes Road to the Town of Wallingford – Town Attorney

Mr. Testa made a motion to Approve a Quit Claim Deed of Wallingford Historic Preservation Trust to property known as 1211 Barnes Road to the Town of Wallingford. Mr. Parisi seconded.

Three members of the Council serve on or for the Board of the Wallingford Historic Preservation Trust and they announced that they would recuse themselves from the discussion and from the vote on this question. Councilor Farrell is President of the Trust. Councilor Rascati serves as Recording Secretary. Councilor LeTourneau serves in an advisor to the board as the Director of Restoration/Project Manager.

Candice Brashears, 90 North Airline Road, asked about the demolition of the Blakeslee House, the land and matching grants offered by the town. It was determined that the demolition was in October 2008. Mayor Dickinson said that we are in a new budget year and that they have not made that request this year. He said that this is a matching fund program, so if they receive funds up to \$20,000, then the town will match that money. He said that the payment of the demolition was the condition precedent to receiving to title to the property. He said that he doesn't think that the town should say that we have no interest in owning that property given its location at an important intersection with Route 68. Ms. Brashears agrees that the town should have it.

Councilors by voice voting Aye were DiNatale, Economopoulos, Parisi, Spiteri, Testa, Brodinsky (6)

Councilors who recused themselves Farrell, LeTourneau, Rascati (3)

The motion passed.

15. Consider and Approve a Transfer in the Amount of \$17,400 to Historic Preservation Trust – Barnes Road Demo Repayment Acct # 001-3070-600-6821 from Regular Wages – Comptroller Acct # 001-1401-101-1000 – Mayor

Mr. Testa made a motion to Approve a Transfer in the Amount of \$17,400 to Historic Preservation Trust – Barnes Road Demo Repayment Acct # 001-3070-600-6821 from Regular Wages – Comptroller Acct # 001-1401-101-1000 as requested by the Mayor. Mr. Parisi seconded.

There was no discussion.

Councilors by voice voting Aye were DiNatale, Economopoulos, Parisi, Spiteri, Testa, Brodinsky (6)

Councilors who recused themselves Farrell, LeTourneau, Rascati (3)

The motion passed.

16. Discussion and action regarding recommendation to Connecticut Department of Transportation to identify the North Cherry Street/Parker Street site as a preferred location for commuter rail platform – Mayor

Discussion with the Mayor, Councilor DiNatale, the Town Engineer, John Thompson, the Town Planner, Linda Bush, Councilor Spiteri, Chairman Brodinsky, Residents Robert Gross, Jason Zandri, Craig Fishbein, Bill Spence, Allen Barbarino, Ben Martin and John Gervasio reached the conclusion to approve the recommendation when the Council voted affirmatively on the motion.

All Councilors present (9) by voice voted Aye.

The motion passed.

20. Discussion & Possible Action concerning the final draft of the proposed amendments to the Charter of the Town of Wallingford – Chairman Mike Brodinsky

Chairman Brodinsky made a motion that the Council accept all the approved changes to the Charter made by the Charter Revision Commission and that the changes in the Charter recommended by the Charter Revision Commission be submitted to the voters for their consideration at the election to be held on November 3, 2009.

Roll Call Vote:

Brodinsky- Yes; DiNatale- Yes; Economopoulos- Yes; Farrell- No; LeTourneau- No; Parisi- No; Rascati- No; Spiteri- Yes; Testa – Yes;

Aye – 5

No - 4

The motion passed.

17. Executive Session pursuant to §1-200 (6) (D) of the Connecticut General Statutes with respect to the purchase, sale and/or leasing of property – Mayor

Mr. Testa made a motion to go into Executive Session at 12:20 P.M. pursuant to §1-200 (6) (D) of the Connecticut General Statutes with respect to the purchase, sale and/or leasing of property. Chairman Brodinsky seconded.

Eight councilors present voted Aye. Mr. Farrell had left the meeting. The motion passed.

Chairman Brodinsky called the Council back into the meeting at 12:40 P.M.

Attendance at the Executive Session:

All Councilors except Councilor Farrell, who was absent at this time. Mayor Dickinson, Town Attorney Small, Fire Chief Struble

18. Executive Session pursuant to § 1-200 (6)(B) regarding strategy and negotiations with respect to a claim filed by Clarence Kirk, et al – Corporation Counsel

Withdrawn

19. Motion to consider and approve a settlement of a pending claim of Clarence Kirk, et al as discussed in Executive Session - Corporation Counsel.

Withdrawn

MOTION

Mr. Testa made a motion, seconded by Mr. Parisi, to adjourn. All Councilors present (8) voted Aye on the motion. Mr. Farrell was absent. The motion passed.

The meeting adjourned at 12:20 A.M.

Respectfully submitted,

Sandra R. Weekes Town Council Secretary

Meeting recorded by Sandra Weekes

Chairman, Mike Brodinsky

Date

Town Clerk, Barbara Kapi

Date

MORAN GIRLS' TRACK & FIELD TEAM:

Certificates to honor the members of:

The State Champion Moran Lady Mustangs Girls' Track & Field Team

The Moran Lady Mustangs Track & Field Team ended their season on a very positive note when they became the Connecticut Middles School Girls' Track & Field State Champions on Saturday, May 30th. They improved from last year when they took 4th place in the State meet. The girls' team finished their regular season with an overall record of 6 wins 1 loss and 1 tie. They also finished 2nd in the Central Connecticut Middle School League with a record of 3 wins 1 loss and 1 tie. During their amazing season the girls' team broke 7 school records.

42 Members of the Girls' team are:

8th Graders
Elizabeth Akier
Samantha Bartel
Amanda Bernard
Rachael Carnale
Lyndsay Crescenti
Amanda Culmone
Julie DellaVecchia
Kseniya Dobrovolsky
Bailey Dombroski
Rachel Doty

7th Graders Rachel Birmonte Loren Birtha Sarah Griglun Casey Hutchinson Michaela Lauria Jessica Everett
Marissa Gadacy
Rachel Hemstock
Kaitlyn Kieslich
Sarah Lavoie
Alyssa Martin
Kristen McNally
Olivia Ney
Rachel Papale
Kathryn Reinmann

Riley Mayne Mackenzie Mendygral Stephanie Michaud Christina Miller Katherine Robison
Taylor Sandillo
Jessica Schlauder
Tiffany Shortsleeve
Elizabeth Slivinski
Melanie Solomon
Alexandra Sperrazza
Rachel Spina
Taylor Wilkinson

Leah Myers Carly Stopper Nicole Sullivan Stephanie Virgulto

MORAN BOYS' TRACK & FIELD TEAM

Certificates to honor the members of:

The Undefeated Moran Mustangs

-- Central Connecticut Middle School Track & Field League Champions.

The Moran Mustangs ended their season finishing 2nd in the Connecticut Middle School Track & Field State Championships for the 2nd straight season. The boys' team also had two members of their team that were Individual State Champions in their events. They were:

- 1. <u>Kyle Paolicia</u> in the 1600 meters (or mile run) with a very impressive time of 4:59.00 seconds.
- 2. Jeffrey Biestek in the Shot Put throwing the shot put 40 feet 6 inches.

The boys' ended their season undefeated with an overall record of 8 wins and 0 losses. In addition to finishing undefeated Moran's Boys' Track & Field Team finished 1st in their league with a record of 5 wins and 0 losses. They are The Central Connecticut Middle School Track & Field League Champions!! During their great season the boys' team broke 5 school records.

33 members of the boys' team are:

8th	α_{r}	ماء	TC
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Matthew Bee Jeffrey Biestek
Joseph Burns
Matthew Caruso
Matthew DelBasso
Richard Dow
Michael Espada

Jose Estrada
Edgar Garcia
Mohammed Ishaque
Givonni Jackson
Sean Merrill
Kyle Paoliela
Jonathan Partesano

Hugh Soriano Anthony Stasulli Matthew Struble Kevin Thompson Gabe Umbehr Christopher Wilner

7th Graders

Sean Barth
Michael Capozzi
Aohan Dang
Christopher DellaCamera
Marcello Granquist

Joseph Grzywinski Daniel Guodace Timothy Morrell Drin Pacuku Michael Pearsall Matthew Pereira Benjamin Renna Carl Thurston

MORAN GIRLS' AND BOYS' TRACK & FIELD COACHES

Certificates to honor the coaches of:

The Undefeated League Champion, Moran Boys' Track & Field Team &

The State Champion, Moran Girls' Track & Field Teams

The coaches of the Moran Mustangs are:

Head Coaches

Steven Scursso – 12 years as head coach Gregory Schena – 1st year head coach

Assistant Coaches

Christopher Baker – 4 years as head coach - 4 years assistant coach George Bikakis – 4 years assistant coach

MORAN GIRLS' AND BOYS' TRACK & FIELD MANAGERS

Certificates to honor the managers of:

The Undefeated League Champion, Moran Boys' Track & Field Team &
The State Champion, Moran Girls' Track & Field Teams

The 6 managers of the Moran Mustangs are:

8th Graders
Devyn Brewster
Victoria Ferrell
Emma Navickis
Emma Stilson

7th Graders
Michelle Knecht
Sarah Volpe

LACKITOON

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Executive Summary

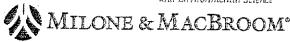
Choate Rosemary Hall is in the process of planning an exciting new teaching and learning initiative for our students, and for public school students in Wallingford – an initiative centered on environmental education. Our plans call for the building of an educationally distinctive Environmental Center on property the School owns on and around East Main Street and Old Durham Road. The initiative also involves the utilization of a house that the School currently owns at 747 Old Durham Road as a potential satellite "field station" for environmental science work. When this program is up and running (hopefully in 2011), we expect scores of students from Choate and from the local high schools (and perhaps middle and elementary schools, as well) will be visiting the Center and/or conducting research projects in the vicinity of both East Main Street and Old Durham Road. We are quite concerned about the safety of students who will be crossing and working along Old Durham Road and the stream bed that parallels the road.

Therefore, as we move forward in our efforts to develop this project, and to better provide students and adults with safe access to the "field station" area and its adjoining stream and fields, we respectfully request that the Town authorizes the closure of Old Durham Road to vehicular traffic from East Main Street to Christian Street for the following reasons:

- 1. To insure the safety of all students and adults studying and working at the Environmental Center "field station" and land on and around Old Durham Road.
- 2. Per our traffic study (see Traffic Report tab), closing Old Durham Road to vehicular traffic (as was done during the bridge repairs in fall 2008) "...resulted in negligible change on the operations of the East Main Street/Durham Road/Christian Street intersection." Indeed, routing cars to the properly designed East Main/Christian Street/Durham Road intersection improves safety. These findings allowed Milone & MacBroom to conclude that "...the closing of Old Durham Road could result in an improvement to public safety."
- 3. By Town standards, Old Durham Road is "at the end of its life." Costs to repair the road and bring it up to town standards are estimated at \$247,000, with annual maintenance, plowing, etc. estimated at \$6,300. By closing the road to vehicular traffic, except for the two private residences and Choate's "field station" area, the town gains a significant savings and decreases its liability for supporting and maintaining a substandard roadway.
- 4. At a meeting on May 26, 2009 at Choate with interested residents who live around the Old Durham Road/Durham Road area, the twenty neighbors in attendance expressed support for Choate's plan to develop an Environmental Center, including the closure of Old Durham Road to vehicular traffic. They specifically, and enthusiastically, supported the idea that by developing the proposed Environmental Center Choate would maintain its property as open space.

Edward L. Showshop

Edward J. Shanahan Headmaster Engineering, Landscape Architecture and Environmental Science



June 16, 2009

Mr. Richard Saltz Choate Rosemary Hall 333 Christian Street Wallingford, CT 06492

RE:

Old Durham Road, Wallingford, CT MMI #2960-13

Dear Mr. Saltz:

John M. Milone, P.E.
James G. MacBroom, P.E.
Vincent C. McDerniott, FASLA, AICP
Stephen R. Dietzko, P.E.
Jeantine Arinstrong Govin, P.E.
Robert A. Jackson, L.S.
John R. Gilmore, P.E.
Edward A. Part, P.E.
Thomas R. Shell, L.A.

David W. Dickson, L A Thomas J. Daly, P.E. W. Andrew Greene, P.E., LEED AP Darin L. Overton, P.E. Anthony A Ciriello, P.E. Nicolle Eurnham, P.E. Mark Arigoni, L A Michael J. Joyce, P.E Michael F. Mansfield, L.S. David Murphy, P.E. Alan Wm Mess, P.E. Henry Ditman, RE. Davíd Sullivan, RE Philip Michalowski, AICP Richard Harrall Kishor Patel, P.E. Thomas P Raisbus PE

Ted G Crawford, P.E., LEED AP Gary Fontanella, P.E.

Rodney I. Shaw, L.A. David R Bragg, P.E. LS William A Root, M.ES Garret Harlow, L.A. Paul E. Mills, P.E. Steven D. George, P.E. Ryan R. Chmielewski, L.A. John Hammer, I. A. Scott G Bristol, LEP William I Magic, In. L.S. John Mike Wilson, P.E. Rvan McEvoy, P.E. Nicholas M. Pomenko, P.E. Andrew T. Manning, RE, George G Caughman, P.E. Michael G. Sherman, P.E. Michael T. Looney, AICP larroa B Edens, P.E. Glenn D Jarvis, P.E. Brian M. Cote, P.E. Nicholas Mansfield, P.L S. Daniel Kroeber, P.E. Kevin C Fuselier, L A Jason D. McCabe, P.E. Keith C. Buda, P.E. Michael T. Doherty, L A. Martin S Overton, CEng., CEnv.

At your request, we have prepared an evaluation of traffic operations on the section of Old Durham Road between Christian Street and East Main Street as well as the impact on the intersection of Christian Street/East Main Street/Durham Road during the temporary closure of Old Durham Road compared to after Old Durham Road was reopened to traffic.

I. Method

To evaluate the impact of the closure of Old Durham Road, we reviewed the existing roadway characteristics, traffic patterns and accident data. Roadway characteristics were evaluated by conducting a physical investigation of Old Durham Road with special attention being paid to the intersections with East Main Street and Christian Street. The traffic patterns and volumes were determined by conducting manual traffic counts at the adjacent intersections while Old Durham Road was closed for repairs and after it was re-opened for the morning and afternoon peak hours. Accident data was obtained from the Wallingford Police Department for the most recent three year period.

II. Data

The subject section of Old Durham Road is approximately 2500 feet long and has a width of approximately 22 feet. The town's standard for residential streets is 26 feet wide pavement. This section of Old Durham Road serves only three single family homes of which one is owned by Choate. Motorists use this section of Old Durham Road as a cut through between East Main Street and Christian Street and as a continuation of Old Durham Road east of East

Milone & MacBroom, Inc., 99 Realty Drive, Cheshire, Connecticut 06410 (203) 271-1773 Fax (203) 272-9733 www.miloneandmacbroom.com

Main Street.

Both ends of the subject roadway have intersections at angles less than desirable. The town's subdivision regulations require streets to intersect at angles as near to 90 degrees as practicable. The intersection with Christian Street is at a 60 degree angle and a relatively level grade. The sight lines to the west are limited by a high point in Christian Street and vegetation along the roadway shoulder. The intersection with East Main Street is at 30 degree angle and at the bottom of a moderate incline on Old Durham Road. The sight lines to the south are limited due to the alignment of the intersection and vegetation along the stream.

A review of accident data for a three year period from June 1, 2006 to June 1, 2009 found that four accidents occurred at the intersection of Old Durham Road and Christian Street. All were classified as a collision with a fixed object. Two accidents occurred at the southern intersection with East Main Street of which one was a rear end and the other was a collision with a fixed object. Four accidents occurred at the northern intersection, three rear-end and one side angle collision. For the same period, only one accident occurred at the intersection of Christian Street/East Main Street/Durham Road intersection. It was classified as a collision with a fixed object.

In October 2008 while Old Durham Road was closed, manual traffic counts were collected at the intersection of Christian Street at Durham Road and East Main Street during the morning and afternoon peak commuter periods. Then in November 2008 after Old Durham Road reopened, another round of counts were conducted during the same morning and afternoon peak periods. The traffic volumes from the manual traffic counts for Christian Street and East Main Street are summarized in Table 1 and 2.

Table 1
Volumes Recorded on Christian Street

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	During Closure of Old Durham Road		After Old Durham Road Reopened		Difference in Volumes	
Time Period	Eastbound	Westbound	Eastbound	Westbound	Eastbound	Westbound
A.M. Peak Hour	129	311	93	206	36	105
P.M. Peak Hour	364	234	233	170	131	64

Table 2
Volumes Recorded on East Main Street

	During Closure of Old Durham Road		After Old Durham Road Reopened		Difference in Volumes	
Time Period	Southbound	Northbound	Southbound	Northbound	Southbound	Northbound
A.M. Peak Hour	159	121	140	109	19	12
P.M. Peak Hour	167	220	139	157	28	63

Table 3 shows a summary of the peak hour data obtained on Old Durham Road at the intersection of Christian Street after it was reopened to traffic.

Table 3
Volumes on Old Durham Road
After Reopening to Traffic

Time Period	Northbound	Southbound	Total	
A.M. Peak Hour	15	55	70	
P.M. Peak Hour	33	41	74	

III. Conclusion

An analysis of the operations of the Christian Street/East Main Street/Durham Road intersection finds good operations under both scenarios. The amount of traffic rerouted by motorists during their daily commute was a relatively small amount of vehicles compared to the existing roadway volumes. Even during peak periods of traffic flow, the volume of rerouted traffic had little affect on the operational safety and delay.

Benefits to closure of Old Durham Road include elimination of intersections with restricted sight distances and difficult sharp turns. Additionally at the Old Durham Road intersection with East Main Street, the closure would eliminate the turns made by motorists crossing East Main Street to continue the through movement on Old Durham Road. Since Old Durham Road and Durham Road join together one-quarter of a mile east of East Main Street, motorists traveling east of that intersection can use Durham Road to conduct their east/west travel. A reduction in vehicles at the Old Durham Road/East Main Street intersection could reduce the potential for accidents that occur at this location. Also a closure of a portion of Old Durham Road would eliminate the need for town maintenance of a roadway which serves as a convenience to a limited number of motorists.

In conclusion, the traffic counts have show that the closing of Old Durham Road to vehicular traffic resulted in a negligible change on the operations of the East Main Street/Durham Road/Christian Street intersection. Also according to the accident data, this intersection has historically been measurably safer than either of the Old Durham Road's existing intersections. Both of these findings allow us to conclude that the closing of Old Durham Road could result in an improvement to public safety.

If you have any questions or concerns, please do not hesitate to call.

Very truly yours,

MILONE & MACBROOM, INC.

Alan Wm. Mess, P.E.

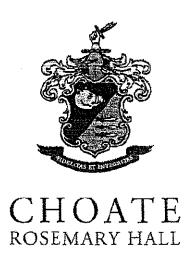
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Vice President-Traffic Engineering and Transportation Planning

Thomas J. Daly, P.B.

Project Manager/Associate

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Environmental Center Program Development

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- Section 7: Programs for Students from Wallingford Public Schools
- Section 8: Environmental Center Faculty

Section 1: Consultants to the Environmental Center Advisory Committee (ECAC)

The following individuals, over the course of the last year have either met with the full complement of ECAC members or with individual members of the committee. These visits have either occurred at Choate Rosemary Hall, therefore permitting the opportunity to "walk the land," or off-site, thereby affording committee members an opportunity to, in a hands-on way, see other environmental facilities.

- 1. Dan Esty, Hillhouse Professor of Environmental Law and Policy, School of Forestry and Environmental Studies; and clinical Professor of Law, Yale.
- **2. David Foster,** Choate, Class of 1972, Wallingford native, Professor of Ecology and Director of the Harvard Forest.
- 3. Emily Stanley, PhD, Professor of the Limnology Department (her specialty is stream ecology) at the University of Wisconsin in Madison.
- 4. Alden Smith, Director, the Mountain School of Milton Academy.
- 5. Willard Morgan, Head of School, Maine Coast Semester.
- 6. Mark Simon, FAIA, partner, Centerbrook Architects and Planners, LLP.
- 7. Buddy Huffaker, Executive Director of the Aldo Leopold Legacy Center, Baraboo, WI.
- **8.** Cheryl Wolfe, Facilities Manager of the Adam Joseph Lewis Center for Environmental Studies at Oberlin College, OH.
- 9. Dwight Merriam, ESQ., Robinson & Cole, LLP.
- 10. Several (consulting) meetings with the Headmaster, the Committee of Academic Department Heads, trustees, and the full faculty.

Section 2: Environmental Centers/Sites Visited

Consistent with the charge to the committee to "research comparable facilities, schools, or programs with an environmental focus," the committee individually or collectively visited the following sites:

- The Mountain School of Milton Academy, Vershire, VT
- The Putney School, Putney, VT
- Chewonki Foundation/Maine Coast Semester, Wiscasset, ME
- Great Mountain Preserve (six thousand acres in northwest Connecticut)
- Cary Institute of Ecosystems Studies, Millbrook, NY
- Harvard Forest, Petersham, MA
- Middlebury College, Middlebury, VT
- Adam Joseph Louis Center for Environmental Studies, Oberlin College, Oberlin, OH
- Aldo Leopold Legacy Center, Baraboo, WI

Section 3: Philosophical Framework for Choate's Environmental Center

For well over 100 years, Choate Rosemary Hall has distinguished itself in the quality of its students, the breadth and depth of its curriculum, the emphasis it has placed on the formation of character, and the leadership it has provided to both secondary education and society at large. From time to time throughout its distinguished history, Choate has undertaken bold initiatives that have not only benefitted its students and alumni, but also opened up areas of study that have inspired and motivated other secondary schools to do likewise. In recent years these initiatives have included, among others, construction of facilities such as the Paul Mellon Arts Center and the Carl C. Icahn Center for Science that reinvigorated those programs, development of the Arts Concentration and the Science Research Programs, as well as steadily increasing participation in academic competitions in science, economics, mathematics, debate and language. It is fair to say, therefore, that Choate has a distinguished history of innovation at the secondary school level.

The prospect of establishing a premiere Environmental Center on 262 acres of the Choate campus represents another opportunity for Choate to enhance the nature and quality of its education, to provide educational leadership at the secondary level, and to distinguish itself among its peers.

Among the principles that should guide this exciting initiative are the following:

- 1. To provide, in response to national and global environmental concerns, environmental education (at different levels of intensity) aimed at developing greater awareness, understanding and responsibility for all Choate students.
- 2. To develop among its students a greater and more informed appreciation of the connection between an understanding of the land and our individual and collective responsibility for it, at the local, regional, national, and international level; and to encourage and enable the exercise of that individual and collective leadership.
- 3. To forge linkages between an understanding of the environment and other disciplines, e.g. history, government, economics, literature, language, and the arts.
- 4. To provide the opportunity for some students to pursue <u>intensive</u> environmental study and research while at Choate, in preparation for further study at the post–secondary level.
- 5. To provide an educational framework that can be replicated, or used, by other secondary schools interested in creating greater environmental awareness and responsibility.
- 6. To implement an environmental program (inclusive of the facility) that is itself environmentally and financially sustainable, and does not exacerbate either the environmental impact, or financial stability, of the school.
- 7. To encourage greater environmental awareness and understanding in our local area of Connecticut by initiating educational outreach programs at the Environmental Center.

Section 4: The Case for Residentiality—Three Terms and One Term

The two principal issues that have occupied the committee and dominated its discussions with others over the last year have been: (1) Whether the Environmental Center should house a core number of students pursuing a science-dominated but inter-disciplinary course of study in an intensive way; and (2) How the Environmental Center curriculum should be shaped so that it adds value to student learning and brings distinction to our school. After many months of meetings, scores of hours of conversation, and the exchange of prolific emails and thought pieces, it is the sense of not only the ECAC but also all of Choate's academic department heads that the Environmental Center must have an intensive residential component. There might be some difference within these two groups as to whether residentiality should be for one-term or for three-terms – though there is clear preference for a three-term experience. This preference has been validated via several focus groups of Choate students that explored the pros and cons of residentiality from their perspective. Following are a handful of the core reasons the ECAC and the academic department heads have focused on a residential program. (We have not listed the substantial impediments that non-residency would create for a quality program.) It is our collective conclusion that true educational distinction and quality is contingent upon the residential nature of such an Environmental Center at Choate.

Residentiality

A. Choate's master schedule of classes is currently built each year to first accommodate lab periods in science; classes in other disciplines are subsequently scheduled around the foundation established by lab periods. This is necessary because labs are integral to the study of science and most labs simply cannot be done within 50-minute periods, especially given set-up and clean-up. The new Environmental Center is expected to house equipment and be the site of experiments not unlike those done in our current labs, but on a much larger scale. It follows logically, therefore, that the laboratory science and experiments housed in the labs and on this land similarly dictate the schedule of all courses at the new Environmental Center. Because of the large-scale science that will be conducted on the site, large-scale blocks of time need to be allocated to the new Center. Such demands clash with the highly scheduled, changing-every-50-minutes timetable that dominates our main campus. It makes sense, therefore, that this Center offer students, teachers and visitors the freedom necessary to perform labs, observations, writing exercises, art workshops, history seminars, etc., that might take one, two, or three consecutive hours in a day. To do this, especially at the odd hours that science sometimes demands (observing nocturnal plants and animals at night, holding English class from 4 to 5 pm to accommodate a science experiment conducted from 1 to 4 pm, traveling for three days to an off-campus site to conduct or observe experiments). students and faculty must be on the same life schedule, and must, therefore, be living together in a shared residence.

Section 4 (Continued)

- B. Students will experience what it means to live sustainably. Because the building will probably be equipped with solar panels and other devices to minimize the usage of outside energy sources, and also various gauges and sensors to inform the inhabitants about their energy use, students will continuously be reminded about the need to conserve. They will develop an understanding of household energy budgets, and will cultivate habits that will help them preserve our natural resources. They will "return" to Choate as models and advocates for living sustainably. (And the Center itself will evolve as a model for other institutions.) Finally, students will be better prepared to bring the benefits of their Environmental Center experiences with them into their professional lives well after Choate.
- C. Living at the Environmental Center will put students in close contact with the land and its wildlife. They will observe seasonal changes, flowering, fruiting and animal behavior, during evenings and nights as well as during the class day. Spontaneous night-time hikes (owl-prowls, for example) or evening data gathering will be easy to arrange.
- D. The students will develop a strong camaraderie as an environmental corps. Over shared breakfasts, lunches, classes and evening studies they will discuss environmental issues, learn from each other, and develop plans for making the larger Choate community more aware of these issues. This immersion experience will hopefully have a life-long impact on them, as the term abroad program does for other Choate students.
- E. Hosting 14 students on site will provide tuition income which will be crucial to running this program. The program will require teachers and a manager of the Environmental Center and environs, as well as equipment and supplies. Without additional tuition income, these expenses would either have to be borne by the School's existing operating budget or come from our raising an additional \$12-\$15 million in endowment for this purpose.
- F. The world we and especially our youth live in is a fragmented, sound-bite world. We should want our students to experience this program with the fewest number of distractions possible (within reason, given their adolescence). Thus, to provide a venue for the students (and faculty) to live what they are learning, to discuss topics as they arise in a spontaneous manner, and to grow "organically" through their experiences seems apt, even vital, in today's world.
- G. As mundane as it may seem, a residential program avoids the preponderance of logistical difficulties (transportation back and forth, absence due to multi-day field trips, evening seminars, access to rooms between classes [in case a student unexpectedly gets his feet wet in the field], different daily and weekly schedules at the Center and on the main campus, etc.) that would arise if Choate students were to live in dorms on the main campus or commute from home but take intensive classes at the Environmental Center.

It is the consensus of the ECAC and department heads that a three-term experience would be significantly more distinctive in terms of the quality of the experience gained by students, and

Section 4 (Continued)

the impact such a program would have in positioning the School within the market place. Is it possible for Choate to host a one-term intensive experience for fourteen students each term? Yes it is, and in the spirit of keeping that option open the ECAC and the department heads have designed not just the three-term intensive experience but a one-term experience as well.

Section 5: A Concentrated Residential Curriculum

The ECAC, in consultation with the department heads, has spent a good deal of time imagining, and getting quite excited about, the kind of academic experience students could have living on the land for three-terms of their junior year (or for one term of their junior or senior year). What follows is a "draft curriculum" covering the formal academic experience students would receive. It is termed a "draft curriculum" because more discussion will occur over the course of 2009-2010 to be sure that what we have imagined in these early stages achieves our overall goals for this program.

A. STUDENTS IN THE THREE-TERM EXPERIENCE WOULD TAKE COURSES IN FIVE AREAS OF STUDY: SCIENCE, QUANTITATIVE STUDIES, HISTORY, ENGLISH, AND THE ARTS (FOR JUNIORS).

- **SCIENCE:** Two courses would be required, a survey course in biology and AP environmental science.
 - a. Introductory Biology or Advanced Topics in Biology (year-long course) The science department would run two biology courses, the first an introductory survey course similar to the courses currently offered in the core curriculum but that would use the land around the Center, the greenhouse and the opportunities they provide for labs, demonstrations, and hands-on experiential learning. The Advanced Topics course would need to be created but would be an advanced biology course that would build on what a student had already mastered having previously taken introductory biology. (This course would likely prepare students for the AP biology exam.) In either case, because of the primary research being carried out (See c.), field methods and data gathering would have to be taught early on in these courses.
 - b. AP Environmental Science (two-term course, fall and winter) As an AP course, APES has a syllabus that is prescribed by the College Board, supplemented appropriately by our teachers at the Environmental Center.
 - c. Environmental Research Seminar (one-term course, spring) As a part of their course work in science, the students in the spring will research an internship possibility. They will also do some primary research, setting up their own experiment if their orientation is to science, but students could elect to do primary research in environmental economics or a related non-science area. (What is important is that they get into primary work in the field and original research.) Students might elect to write to professors and apply for summer research in environmental science, as our regular Science Research Program (SRP) students

Section 5 (Continued)

do, or in an environmental law firm or with a foundation such as the Sierra Club. Either way, a student could follow up this research/internship in the fall of senior year working alongside SRP students in the existing *Research Seminar II* course.

- QUANTITATIVE: A year-long sequence of quantitative courses would further a student's quantitative and analytic skills, even though the courses may be outside the normal math sequence.
 - a. Energy and Sustainable Living (one-term course, fall) This course would look at questions such as: How can we design buildings to make minimal or no use of fossil fuels? How can solar and wind energies best be captured and stored? What is the physics of insulation? What is needed for passive and active solar heating? ...for geothermal heating? These questions will be investigated using the Center itself as a model. This course could also look at the energetics of alternative fuels such as ethanol, biodiesel, methane, and hydrogen.
 - b. Mathematical Modeling and Statistics (two-term course, winter and spring) This course would provide an introduction to mathematical modeling and statistics and would be linked to modeling in the field and designed to connect to the research. (These courses could cover the precalculus skills that would qualify students to take AP Statistics in their senior year.)
- HISTORY and SOCIAL SCIENCE: The study of American history, a staple of the junior curriculum, would be postponed until senior year and replaced by the following year-long sequence of courses.
 - a. Our Land Through Time (one-term course, fall) This course would provide a coordinated historical, ecological and geographical study that would document the cultural and biological history of the land along with the changing policies and attitudes towards it. Historical information of both an archival and ecological nature could be assembled to create historical maps and a timeline of changes in ownership, land cover, historical context, and environmental, regulatory and legal changes. The study would be of this land in Wallingford and in the context of Southern New England.
 - b. Environmental Economics and Government Policy (two-term course, winter and spring) This course would include an introduction to macro- and microeconomics and a study of the implications of various government policies. Examples: the costs of environmental regulations; the economic impacts of climate change; carbon policy; environmentally responsible behavior, etc.

The writing and research skills inherent in our junior-year American history courses would still be emphasized.

Section 5 (Continued)

- ENGLISH: Nature and the Environment in American Literature (year-long course) —
 This course would approach American literature from three vantage points. The fall would focus on environmental journalism and nature writing, the winter on American literature of the land, and the spring on spiritual and religious views of the land and possible authors include Henry David Thoreau, Ralph Waldo Emerson, Wendell Berry, Jack London, and Rachel Carson.
- ARTS: Portfolio This would be a full-year endeavor requiring the equivalent of one term of work and credit. Students would tailor their art to their interests (photo, sketching). Art teachers from the main campus could use some of their studio time to work with the Environmental Center students every few weeks throughout the year.

B. THE CURRICULUM FOR A SINGLE TERM-LONG RESIDENTIAL PROGRAM FOR JUNIORS AND SENIORS WOULD LOOK LIKE THE FOLLOWING:

- SCIENCE: Two courses again would be required.
 - a. Fall:
 - i. Field Ecology, to include field research data collection and field techniques. This course would also include an introduction to statistics.
 - ii. The first term of *AP Environmental Science*, which the student must follow with the second term of *APES* in the winter on the main campus.
 - b. Winter:
 - i. AP Environmental Science taught double time i.e., the full two-term course taught in one intensive term, thus it receives two credits.
 - c. Spring: Field Ecology and Topics in Environmental Science

In addition, our goal would be to prepare interested students for the possibility of a similar type of summer internship experience as described under the year-long curriculum.

- **QUANTITATIVE:** *Energy and Sustainable Living*The same course as described above would be offered every term.
- **HISTORY:** Our Land Through Time
 As described above, the same course would be offered every term but it would incorporate more public policy content.
- **ENGLISH:** Literature and Nature Writing

 The same course would be offered every term, with themes and topics overlapping appropriately with courses in the core curriculum of juniors and seniors.
- ARTS: This would be an afternoon activity (reflect on the land, produce artistic works, and display them). Our current thinking is that this art would not receive a course credit.

Section 6: An Environmental Program for All Choate Students

The ECAC and the department heads believe that the opportunities associated with the Environmental Center should and must go well beyond the intensive academic immersion experience the above curriculum provides for the residential students in this program and be made part of what we are referring to as the Omnibus Program: for all Choate Rosemary Hall students, especially students in their junior and senior year.

A. Examples of <u>existing</u> mechanisms that guarantee exposure of non-residential students to environmental issues, concerns, and education:

- Current courses that could take place, in part, at the Environmental Center, in and around the Old Durham Road "field station," or on the land:
 - O Science (class work and labs at all levels):
 - Physics topics such as heat, thermodynamics, and energy use
 - Chemistry topics such as the identification of organic compounds in nature and the manufacture of biodiesel fuels
 - Biology topics such as forest succession, invasive species, composting, and biodiversity; investigation of a local farmer's field use for hay and corn silage; extensive ornithology (mainly redwing blackbirds) studies
 - Environmental Science observational studies of the land and its evolution over time
 - o Global Scientific Issues is a term-long 3rd and 4th form course in science that fulfills the Contemporary Global Studies requirement and currently covers a number of pertinent science and environmental issues such as: biodiversity and deforestation, global warming, population growth and impact, and water (use, irrigation, pollution, politics of, etc.).
 - o Mathematics
 - Statistics classes could use the data collected at the center
 - Dynamic Modeling class could model succession, land use changes over time, etc.
 - o In addition, units in American history (e.g., the reform movements of the 1830's), English (e.g., as all juniors read Thoreau or in senior electives such as *Explorations in Nature Writing*) and the Visual Arts (photography, digital filmmaking, painting and drawing) could draw inspiration from the land.
- Existing extracurricular undertakings that occur on the land
 - o The Lit, Choate's premier literary publication these students use the area around Paddock Farm once or twice each year for writing projects
 - o The Environmental Action Coalition, a long-standing club, uses Paddock Farm for apple orchard, pie making, Monarch butterfly tagging, nature walks, and planting new hybrid sweet chestnut trees from Yale/American Chestnut Foundation.

Section 6 (Continued)

- B. The ECAC considered as well <u>mechanisms that fall outside current offerings</u> that would guarantee exposure of non-residential students to environmental issues. Examples include:
 - The creation of new courses as part of the core curriculum such as Agroecology, Fuels of the Future, Landscape Art, and Botany that could be taken by anyone. Some of these could perhaps be sixth course options offered in the afternoon at the Environmental Center.
 - The creation of afternoon activities that could be open to students as an alternate activity (and/or approved project) under our present Athletic requirement.
 - The inclusion of a project room in the facility for activities such as robotics or other engineering enterprises that would bring students to the center.
- C. In addition, some activities the ECAC is assuming would be core components of the Environmental Center will necessarily impact most if not all members of the community. These include:
 - Organic gardening (soil studies, study and use of natural pesticides, composting, etc.) and the cultivation of a limited array of fruits and vegetables for consumption in Choate's Hill House dining hall; and
 - Synergy between the "green" facility that will be the home of the Environmental Center, the sustainable lifestyle of those living at the Center, and the recent work and efforts of the Sustainability Committee on the main campus.

It is worth noting that among the feedback the ECAC received from faculty and trustees since January 2008 is the recommendation not just to develop new courses but to devise units in existing courses across the curriculum that would allow all students to connect with this land and, by extension, with environmental issues locally, regionally, and globally. In fall 2008, the department heads brought this recommendation full circle back to their departments and asked their teachers to include in course planning for the future any revisions they might wish to consider in light of the proposed Environmental Center and related program. It is not surprising then that the academic department heads are currently of the mind that it will not be necessary to require students to take courses that connect to the new Environmental Center or connect to the land itself. As indicated above, there are currently several existing courses that connect to the land and others that would be enhanced by connecting to the facility. In addition, the department heads are convinced that more faculty and students will make increasing and extensive use of the land as opportunities are provided to develop new course materials over the course of the next year and one-half. The ECAC and the academic department heads are convinced that every student who graduates from Choate Rosemary Hall will be formally (through the curriculum) and informally connected to what happens on the land and in Choate's Environmental Center.

The ECAC has not yet discussed fully the nature of the program that would be hosted at the Center during the summer months. This time clearly affords the school an opportunity to provide outreach programs (related to the environment and the land) to local students, to students from other secondary schools around the nation/globe, and to research universities. (We presume there would be the opportunity to generate support funds for these efforts through "tuition" charged for residence within the Center.) We will continue to discuss these options throughout the coming school year, once we have finalized the approach we want to take with our own students.

Section 7: Programs for Students from Wallingford Public Schools

The ECAC has developed the following outreach goals with regard to working with Wallingford Public Schools to make programs at the Environmental Center available to Wallingford students:

- Coordinate with the two local high schools to discuss interest in programmatic participation in Choate's Environmental Center;
- Work with the K-12 Science Coordinator to establish a range of offerings and opportunities at the Environmental Center which may be utilized by students at all levels;
- Develop learning opportunities that specifically encourage Choate and local public high school students to work side-by-side on environmental coursework and/or issues in order to improve relationships between Choate and town students, and foster a sense of shared responsibility for the land on which they live;
- Enhance public school students' access to land appropriate for field study for course work they are already undertaking in their current curriculum; and
- Develop the Environmental Center as a center of excellence that not only adds recognition and value to Choate, but enhances the educational experience of all students who study there, also bringing distinction to the Town of Wallingford and its educational system.

To date, productive meetings on achieving these goals have taken place with the principals of both Lyman Hall High School and Dr. Mark T. Sheehan High School. In addition, the Director of Lyman Hall's Agricultural Education program has walked Choate's land with his principal and Choate's Headmaster. There are many exciting opportunities for coordinating with Lyman Hall's existing Ag-Ed course work, and providing needed access to land for the same.

Next steps include meeting with the K-12 Science Coordinator, and establishing a joint faculty committee from Choate and Wallingford Public Schools to strategize on coordinated learning opportunities for both Choate and local public school students and map out the programs to be developed.

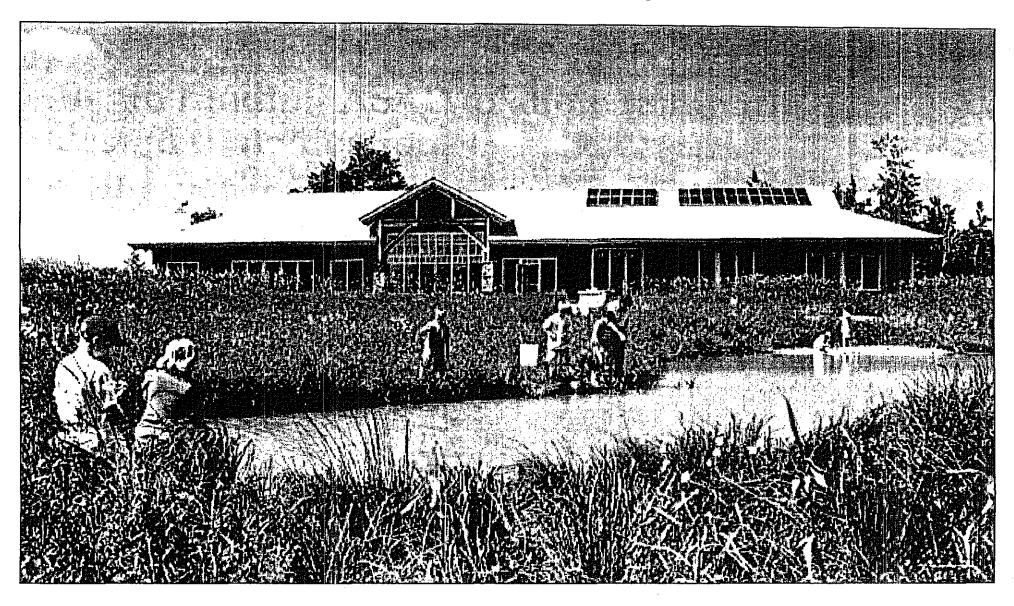
Section 8: Environmental Center Faculty

The faculty and the ECAC believe that, in order to support both the intensive and the Omnibus Program, the Environmental Center should host a full-time, in-resident scientist and one other faculty member from the humanities or social sciences. In addition, the Center will need a second scientist/director responsible for the overall orientation of the program and for creating synergies with other schools, universities, and the Greater Wallingford area. These three individuals would comprise the resident faculty for the Center; but there will also be, probably on a rotating basis, several adjunct faculty especially in the areas of literature, economics, math, and history. It is currently thought that these adjunct faculty would not be additional faculty, but rather existing faculty whose course offerings bear a relationship to the land.

The two full-time residential teachers would live in the center with 14 students, whereas the Environmental Center Director would live in an existing house contiguous to the center.

In addition to the faculty, the ECAC believes that the care of the land – its stewardship, if you will – apart from the use of the land as a living laboratory will require a residential land-use manager responsible for the healthy management of the woodlots, the wetlands, the fields, and the hedgerows over the course of twelve months of the year. It is quite conceivable that residential students and non-residential students could be involved in these activities as well. There is currently another Choate-owned house on East Main Street contiguous to the proposed Environmental Center that could house this manager; and Paddock Farm has barn space for the storing and servicing of any heavy equipment that may be necessary.

Sample Environmental Center Design



Sample Environmental Center Design



Town Benefits

The development of an Environmental Center at Choate Rosemary Hall, and the requisite closure of Old Durham Road to vehicular traffic, affords the following benefits to the Town of Wallingford:

Adds <u>262</u> acres of <u>no-cost</u> Open Space within the Town of Wallingford

According to the Conservation Commission, the Town of Wallingford currently has 4,956 acres of open space, with a goal of reaching not less than 21 percent open space within the town's 39-square-mile area. On similar large-track purchases in the past, the town paid between \$7,935 per acre (\$2.2 million for 275 acres on East Center/Tamarac Swamp) to \$41,228 per acre (\$3.25 million for 79 acres on Dibble Edge Road). Averaging these costs, at \$25,000 per acre, Choate's open space lands would cost Wallingford \$6.5 million if the town had to purchase the equivalent amount of land. By creating the Environmental Center, and closing Old Durham Road to vehicular traffic, Choate affords Wallingford the significant benefit of access to prime open space land at no cost to the town.

• Creates a leading-edge Environmental Center with <u>learning opportunities for Wallingford's public school students</u>

Choate's Environmental Center will be designed with eco-friendly living and learning spaces for Choate students, who come from 41 states and 33 countries, along with students from around the globe who come for Summer Programs, and most especially, Wallingford students. Via a collaborative public school and Choate faculty committee, we are working with our colleagues in Wallingford to <u>create dynamic programs that will enable public school students to study in and benefit from Choate's Environmental Center</u>, providing an exciting new resource for all Wallingford students and encouraging career development in this important area of science.

• Preserves in perpetuity the environmentally fragile, abundant ecosystem

The land designated as open space for the Environmental Center is uniquely and richly diverse in its value for study and research. Please refer to the correspondence from David Foster, Director of the Harvard Forest, in the next section for detailed information.

• Establishes Wallingford as a Center for Excellence in Environmental Studies

A new Environmental Center at Choate will bring regional, national and international recognition to Wallingford, along with economic stimulus for the town's restaurants, hotels, retailers, engineers, contractors, and other businesses.

• Improves safety, and <u>decreases potential Town liability and costs</u>, in a number of areas (please <u>see</u> the photos on the pages that follow):

First, for residents of 788 and 790 Old Durham Road through the creation of a new driveway and cul-desac that greatly improves emergency vehicle access for the four families living in these residences.

Second, by closing vehicular access to a narrow and dangerous road that is "...near the end of its life" and would otherwise remain a liability for the town. By town estimates, reconstructing Old Durham Road to the town's 26-foot-wide standard, with surface drainage and curbing, is estimated at \$247,000.

Third, by eliminating the town's annual cost for maintenance, repair and plowing on Old Durham Road, potentially saving Wallingford \$6,300 annually at current costs.

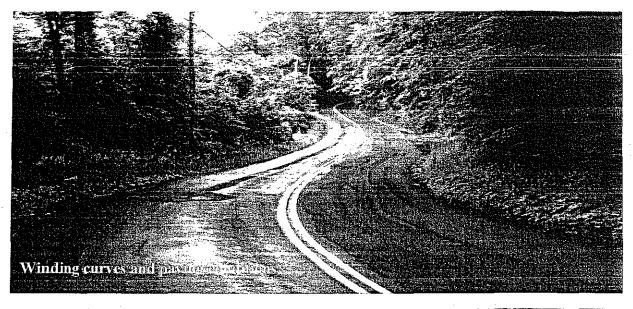
Fourth, by ensuring the safety of all who study in any or all of the Environmental Center's main or field stations, or who wish to enjoy the abundant open space. Indeed, Choate's donor won't go forward on the Environmental Center without the road closure due to his concerns about the inherent risk to students and faculty studying on the land.

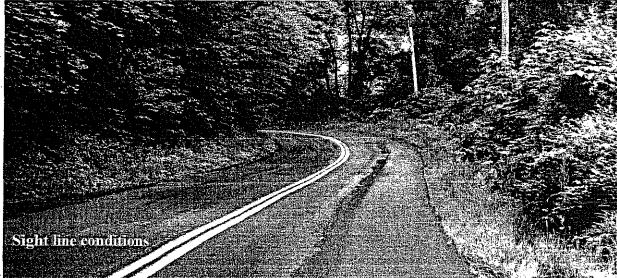
Photos of Old Durham Road

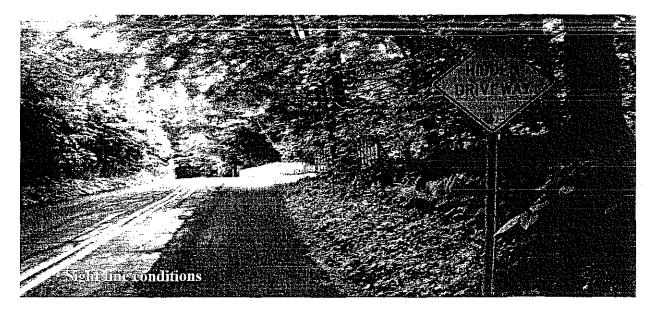












Science and Conservation Infrastructure for an Environmental Laboratory

Brainstorming Ideas Based on Discussions at Choate Rosemary Hall

David Foster
Harvard Forest, Harvard University
May 27, 2008

Our Land in Space

Develop a comprehensive GIS (Geographic Information System) for the land at four scales: Choate Property; Township (Wallingford); State; Southern New England. See www.highstead - Geographical Context. This series of map overlays would accurately capture all major features—topography, soils, trails and roads, landmarks, buildings, vegetation, etc. Over time it would grow immensely as students add overlays of historical use and ownership, research sites, etc. and as environmental changes are documented.

Value: Develop student and faculty GIS and GPS (Geographic Positioning System) skills and familiarity with geography, cartography, and physiography. The town of Wallingford and South New England context will be useful for many purposes and will encourage students to envision their land (and life) in a broader context. Maps will provide the basis for all future work, provide exciting visuals and are compelling in outreach and fundraising. These can easily go into a web site for interactive use in classrooms or anywhere.

Our Land through Time

Coordinated historical, ecological and geographical studies that document the biological and cultural history of the land along with changing policies and attitudes towards it.

Assemble historical information of both an archival and ecological nature. Use this to create historical maps and a timeline of changes in ownership; land cover; historical context; environmental, regulatory and legal changes. Convey the phenomenal changes (Wallingford to Southern New England) in the conservation context of the land.

Materials

Ecological: paleoecology; tree rings; historical features and artifacts on the land (stone walls, property bounds, sites of erosion, uproot mounts, etc.); Aerial photographs (1938 to present);

Historical: maps, interviews, newspaper accounts, historical photographs; census records, deeds, probate documents, contracts, other town records, including maps of Wallingford's development through time.

Our Changing Environment, Land and Nature

Develop a suite of simple but diverse measurements that can be repeated through time to document the changes in the environment, vegetation, wildlife and water. These will form the core of long-term ecological studies that will yield exciting results themselves but will also provide the context for other research as well as reveal many future surprises. Prioritize on characteristics that are: easy to measure, important determinants of future conditions; interesting to students; expected to change rapidly in the near future; important to society; within faculty and collaborator expertise.

Examples

Forest dynamics—a simple array of permanently marked plots scattered across the landscape in which every tree is measured and all species are assessed. An archived photo taken from one plot corner would document visual changes. These plots could be resampled every 5-10 years. Collectively, they would also provide stunning maps of variation in the land across the property and over time they could be extended from forests to fields, wetlands, shrublands. Should include a baseline sample of the soils in each plot to document environmental controls on the vegetation. Initial study would require outside advice, botanical consultant and soil analyses. This is a critical study.

Meteorology—basic parameters: wind, temperature, precipitation, humidity, soil temperature.

Hydrology—stream flow; water table levels in the stream, vernal pool and various wetlands. Fairly straightforward to automate and connect via wireless.

Bird (and other species) Dynamics—locate faculty or a group of local ornithologists who would be willing to work with students to census the birds at permanently marked points at the same time each year. These would be arranged across the variety of habitats, including plots sampled for vegetation. Other taxa that would be intriguing to follow include: butterflies, salamanders, frogs, small mammals, etc.

Reading our Land—Clues to History and Ecology

Over time have students, faculty and visitors work to develop a guide (web-based and hardcopy) that explains and illustrates (photos, art, maps, diagrams) how to read the history and nature of this landscape, based on the physical variation in the land, artifacts such as stone walls, barb wire, earth removal, etc., and the type, shape and growth of the plants, especially the trees. This was basically what we were doing as we walked the landscape together.

Such an interpretive guide does not exist for any other site and yet it would provide an invaluable tool for all users of this land as well as students, naturalists and scientists worldwide. I am working on a related book that covers much of New England and it would be interesting to include examples that emerge form the Wallingford landscape.

If example of various features were mapped accurately (GIS/GPS) this information would greatly aid the historical and ecological studies and could be used as part of a broader interpretive guide to the land. Two obvious products: web-based guide to reading the New England countryside, self-guided natural and cultural history trail through the land.

Invasive Pests and Plants

Plants— (1) identify a few important invasive species (e.g., garlic mustard, honeysuckle, Japanese barberry, Norway maple), (2) map their general distribution across the landscape; relate this to the history of the land, surrounding forest type and nature of the soils, (3) map in detail select populations to document their rate and geography of spread, and (4) conduct some simple removal experiments (with proper experimental controls) to examine the effectiveness of eradication.

Pests—monitor specific tree species that currently are infested with exotic pests or pathogens, e.g. chestnut, hemlock and beech. Although we know that each of these species is declining or changing rapidly due to these pests, there are almost no latitudinal studies of these dynamics (actually, none that I know of). Over a short period of time the students could assemble a remarkable demographic data set that could yield publishable results.

Students and faculty would also want to anticipate the future arrival of other pests (e.g. emerald ash borer) so that similar studies could be set up in advance.

Retrospective (historical) studies of the impacts of existing pests/pathogens could be undertaken by looking at the tree rings of infested trees. Either by coring or cutting trees, dramatic changes would be revealed.

Earthworms—there are no native earthworms (this is one reason the nightcrawlers and other exotic worm species are having such a dramatic and negative impact on forests; they are good for gardens, not natural landscapes). Looking for and documenting the impact of these exotic and invasive species would be surprisingly interesting.

Deer Impacts—Erect 2-5 large (e.g., 20x20 meter) black wire mesh fence exclosures (with adjoining controls) in different forest or regenerating habitats. These unobtrusive experiments are easily and fairly inexpensively installed by contractors and provide both a striking visual display of forest dynamics, interesting opportunities for research in population ecology and plant-animal interactions. Results from this work could be compared with similar data collected elsewhere in Connecticut thereby generating collaborations and exposing the students to other landscapes.

Wildlife Cameras—Inexpensive, motion-triggered cameras provide an easy way to document many of the more elusive species in the woods, including deer. An intriguing project for image and digital savvy students.

Management Zones

The extensive number of projects that will develop on the property will rapidly lead to chaos and conflict if the landscape isn't managed carefully. To anticipate and deal with this you should develop an administrative structure that includes something like the following.

Advisory Board—Diverse composition including users, stakeholders and administrators;

Research Committee—Small group that knows the Center and land well; develops management zones and guidelines for research and use; reviews in a timely fashion all proposals for research or other activities;

Research proposal application—Every study should be preceded by an application that outlines who, where, why and how. This also identifies the supervisor and commits the researcher to archiving all data. see http://harvardforest.fas.harvard.edu/research/conducting.html

You can model your approach on many successful examples of sites and so proceed efficiently without making all of the mistakes that the rest of us have over the past century.

Management Zone Map

A map that broadly outlines allowable activities for different portions of the property. While some of this may change over time, there are many potential incompatible uses and a small property runs the risk of becoming fragmented, degraded and pockmarked with impacts. After 100 years, the Harvard Forest has just developed such a management plan and map and so there are examples to follow.

Some possibilities:

Reserve Areas—Passive, low intensity activity and studies. No cutting of trees, extensive digging, erection of intrusive research equipment, eradications of plants, etc.

Science Research Areas—Areas of forest, grasslands, etc. that open to approved intensive studies and experimental manipulations and management. Would include: Experimental Gardens and Experimental Fields.

Intensive Development Areas— The land areas designated available for buildings, infrastructure and future development, etc.

Archive

It is critical that the Center develop a permanent (physical and digital) repository for all data, samples and copies of background information. Students, faculty and all users

should have impressed upon them that every bit of information collected (field notes, photographs, soil samples, tree rings) is an essential building block in this intellectual enterprise. Students especially have the tendency to downplay the importance of their work as just class assignments, etc. But in this case there information will be used by all successors and so care needs to be taken in collecting and retaining everything.