

**From:** Anna Breinich  
**Sent:** Monday, August 10, 2015 4:00 PM  
**Subject:** RE: Neighborhood Protection Standards

Hi,

Neighborhood Protection Standards are located in Section 4.10, p. 4-43. The additional restrictions specific to Residence Halls and Multi-family Dwellings is in Section 3.4, p. 3-17. Regarding district consolidation, at the last ZORC meeting it was decided to leave as is for now until staff had an opportunity to check average lot size and density for R-2. We will further discuss districts as we get through Draft #2.

Anna

**Sent:** Monday, August 10, 2015 2:55 PM  
**To:** Anna Breinich  
**Subject:** Neighborhood Protection Standards

Hi Anna ~

I just started my initial review of the second draft of Brunswick's zoning ordinance and have not had a chance to review it thoroughly. I've received numerous inquiries from neighbors who are reviewing the new draft as well, asking me if I know where to find the *Neighborhood Protections Standards*, specifically the no-through streets, no-cut zone/setbacks and the like, as discuss extensively throughout the review of the first draft. I have not been able to locate it myself and would appreciate it if you could direct me to the page it can be found on. I will then relay that information directly to my neighbors.

I did notice that R1 and R8 are still combined as the new GR-1. My understanding at the conclusion of the last meeting of the first draft ordinance was that the committee found R8 and R2 to be more similar in nature and thus more appropriately combined into a single zone, leaving R1 (Longfellow Ave.) as a zone unto itself. I would appreciate it if you could offer some clarification to this issue.

Thank you for your help ~

C.A. WHITE & ASSOCIATES LLC

One Main Street  
Yarmouth, Maine 04096  
www.cawhitemaine.com

(207) 846-5599  
cell (207) 749-6906  
cawhitemaine@gwi.net

4 September 2015

Mr. Paul Burgio & Mr. Todd Bober  
Department of Navy  
Base Realignment and Closure PMO-Northeast  
4911 South Broad Street  
Philadelphia, PA 19112-1303

Re: *Base-Wide Land Use Control Implementation Plan for Former Naval Air Station Brunswick, Maine dated August 2015*

Dear Mr. Burgio and Mr. Bober:

This letter is submitted on behalf of, and with input from, the Brunswick Area Citizens for a Safe Environment (BACSE) to provide comments regarding the ***Base-Wide Land Use Control Implementation Plan for Former Naval Air Station Brunswick, Maine*** dated August 2015 (the "LUCIP"). The LUCIP was prepared on behalf of the U.S. Navy, but the author and contractor who prepared the document are not identified. Although the transmittal letter indicates that it is a draft document, the plan is not identified as a draft.

The Brunswick Area Citizens for a Safe Environment (BACSE) have carefully reviewed the draft LUCIP and found it to be inadequate to protect human health and the environment. We strongly urge the Navy to revise the plan in several ways.

1. A base-wide groundwater restriction is necessary for the former Naval Air Station Brunswick (NASB). The recent discovery of perfluorinated compounds (PFCs) in unexpected locations in both surface water and groundwater demonstrates that the nature and extent of the PFC contamination at NASB is still not known. The LUCIP is misleading when it indicates only a few distinct areas where groundwater is contaminated, because other areas, like the petroleum sites, are also known to be contaminated, emerging contaminants like PFCs and 1,4-dioxane may be found in additional areas, and the continued migration of contaminants through the groundwater is likely.

As you are aware, in 2014 PFCs were discovered at levels that exceeded EPA's provisional health advisory in the drinking water supply that serves the tenants at the former Pease Air Force Base in Portsmouth, NH. Follow up blood tests on people exposed to the contaminated water found that many had PFC levels in their blood that were several times higher than the national average. This incident occurred despite the implementation of LUCs in the form of deed restrictions establishing a Groundwater Management Zone and ongoing monitoring of the groundwater at the former base. These restrictions were not sufficient to protect the public from exposure to contaminated

groundwater. Nor was the Air Force's response sufficient once the problem was discovered. After a year of delay, the U.S. Environmental Protection Agency (EPA) issued an Administrative Order last month forcing the Air Force to remediate the contamination, restore the aquifer and conduct further sampling to determine if residential wells have been affected.

2. The base-wide restriction on the use of groundwater should be accompanied by a requirement that all drinking water on the former NASB be provided by the Brunswick & Topsham Water District. Most of the developed area of the base is already supplied by the Water District, and any new buildings and new uses should also be connected to the public water supply. This approach was taken in Ayer, Massachusetts at the heavily contaminated Former Fort Devens site. The citizens of Maine should expect no less protection.
3. The LUCIP's reliance on the Brunswick zoning ordinance is misplaced. The Town has yet to adopt the revisions to the zoning ordinance, after extensive delays and signs of limited public support for the zoning revision. In preparing the revisions, the Town decided not to adopt groundwater restrictions for Brunswick Landing, but merely incorporate a notice to applicants of U.S. Navy Land Use Controls, or deed restrictions.
4. Furthermore, to rely on action by Town staff to provide protection from hazards is completely nonsensical when the current zoning rules exempt initial non-military re-occupancy of a building in the NASB Reuse District from development review, even with a change in use. Expecting the Town to enforce the land use controls would be an unfunded mandate, shifting the costs of implementing the land use controls from the Federal government to local taxpayers.
5. The LUCIP does not adequately address the known migration of the contaminated groundwater in the Eastern Plume beyond the base boundary. Wells of homeowners living next to the Eastern Plume provide exposure pathways to humans and are a potential health risk. Comprehensive testing of private wells, including emerging contaminants such as PFCs, and connecting affected areas to the Brunswick & Topsham Water District must be a priority moving forward.
6. The LUCIP is not enforceable. BACSE strongly urges that the Navy, EPA and the Maine Department of Environmental Protection (DEP) adopt a layering approach that includes an enforceable Declaration of Covenants and Restrictions by DEP incorporating the land use controls. The LUCIP has no mechanism for either DEP or the EPA to enforce any land use controls. The plan does not provide any method for abutting property owners to report a violation that requires correction. The LUCIP relies on self-reporting by owners and users of the property, without identification of where the report should be made, and without any penalties for failure to do so.

BACSE had expected the Navy to take a preventive approach in the LUCIP as indicated in earlier discussions. Land use controls are a temporary measure until soil contamination is remedied and the groundwater aquifer is restored in accordance with the records of decision. We would prefer not to see the Navy face a consent order like the one issued by EPA against the Air Force at the former Pease Air Force Base in New Hampshire for future incidents arising from a failure to address PFCs and other contaminants in drinking water. The LUCIP needs to be strengthened to avoid such potential risks to public health in Brunswick.

BASCE looks forward to discussions about the LUCIP at the upcoming Restoration Advisory Board Meeting on Thursday 17 September 2015. More specific comments on the Draft LUCIP are attached. Please contact me if you have any questions.

Sincerely,



Carol A. White  
**BACSE Technical Advisor**  
President, C.A. White & Associates LLC  
Maine Certified Geologist No. GE268

cc: Hard Copy: BACSE Archives (c/o David W. Chipman)  
Curtis Memorial Library – Brunswick NAS Archive

Email distribution: BACSE Internal Distribution (c/o Juris Apse)  
Mr. P. Burgio, Dept. of the Navy, Base Realign. & Closure PMO-NE  
Mr. Todd Bober, Dept. of the Navy, Base Realign. & Closure PMO-NE  
Mike Daly, USEPA Region#1  
Pamela Harting-Barrat, USEPA Region#1  
Iver McLeod, MEDEP  
David W. Chipman, Harpswell Rep. to RAB  
Anna Breinich, Dir. of Planning, Town of Brunswick  
Suzanne Johnson, RAB Co-Chair  
Robert Leclerc, NAVFAC site representative  
Scott Libby, Topsham Rep. to the RAB  
Carol G. Warren, RAB/BACSE  
David S. Page, Brunswick Rep. to the RAB  
Tom Brubaker, MRRA

Attachments

## SPECIFIC COMMENTS ON THE LAND USE CONTROL AND IMPLEMENTATION PLAN

7. **Restoration of groundwater** The LUCIP should acknowledge that restoration of groundwater is still the goal at NASB. Under the CERCLA, the expectation is that groundwater be returned to its *beneficial use wherever practicable in a reasonable time frame* and *Institutional Controls should not substitute for active response measures* (EPA, 2012). Consequently Land Use Controls should be considered temporary and their anticipated duration should be specified on a site by site basis in the LUCIP. For example the final 1999 ROD for Site 9, the Neptune Disposal site, says that the estimated cleanup via natural attenuation is estimated to take up to 20 years.
8. **Timing of LUCIP Release** As BACSE noted in our 11 August 2015 comments on the Draft Fourth Five Year Report, the timing of the release and review of the LUCIP and the Fourth Five Year Report are out of sequence. The LUCIP should have been reviewed and approved prior to issuance of the Fourth Five-Year Review report in order to support the findings in that document. Otherwise LUCs cannot be considered as being “in place”. Conclusions in the Fourth Five-Year Review report, in particular related to protectiveness, rely on the implementation of a final, approved LUCIP. The completion of a LUCIP was listed a goal in the Second Five-Year Review with a projected completion date of 2005-06. Five years later, in the Third Five-Year Review, implementation of LUCs and a LUCIP were again identified as a near term goal. It has taken over a decade for the LUCIP to be released as this incomplete draft.
9. **Perfluorinated Compounds.** Recent investigations at the former NASB have detected perfluorinated compounds (PFCs) in the groundwater and surface water samples above EPA Health Advisories and Maine Maximum Exposure Guidelines (Tech Memo, Base wide PFCs in Groundwater, 2015; MDEP, 2015). Elevated concentrations of PFCs in groundwater and surface water occur outside of the boundary of the proposed Groundwater Management Zone. In the same study samples of the treated effluent from the Ground Water Extraction and Treatment System indicate that PFOA concentrations have increased significantly to concentrations exceeding federal and state health advisory levels and that the treatment system is not effectively removing this compound from the groundwater. Currently effluent containing PFCs above health advisories is infiltrated back into the ground. BACSE is concerned that the nature and extent of these contaminants have not yet been fully evaluated and therefore may present a risk to future users of these properties. **Given the uncertainty about the nature, extent and potential health effects of these contaminants BACSE’s position is that a base-wide restriction on groundwater use is necessary.** Furthermore since PFCs have been also been detected in surface water samples from the Picnic Pond System, the Navy needs to develop LUCs that address this potential exposure pathway.

### PURPOSE AND SCOPE (PAGE 1-2)

10. **Base-Wide Land Use Controls.** Although the title of the document is **Base-wide** Land Use Control Implementation Plan, the plan only addresses Sites 1, 2, 3, 4, 7, 9 and the Eastern Plume and Site 17. It does not include groundwater and soil contamination at other sites on the base such as the Old Navy Fuel Farm or the Navy Exchange. The LUCIP is contradictory in that text on page 1 states that “*In addition, this LUCIP includes documentation related to LUCs to be implemented at CERCLA sites*”

*without final RODs (Site 17 groundwater only) and non-CERCLA sites such as petroleum-impacted and munitions-related sites within the former NAS Brunswick to provide protection of public health and/or safety”* but no such documentation on non-CERCLA petroleum and munitions impacted sites are included in this LUCIP.

What LUCs, if any, are currently in place for these non-CERCLA sites? Land use controls associated with active base operations (i.e. Base Instructions 5090.1C) are no longer in effect so what protections are currently in effect to prevent exposure to contaminants on the non-CERCLA sites? This LUCIP is incomplete without this information and the public is at risk without the implementation of specific land use controls on all contaminated sites on the former base.

11. **Implementation and Enforcement of Land Use Controls.** The process for enforcing the LUCs is not specified in the LUCIP. The authority and specific process for implementation and enforcement of the LUCs should be explained in the plan. Do EPA, DEP and the Town have authority to enforce the LUCs? According to the LUCIP *“The Navy may in the future delegate or transfer authority to conduct these actions to another entity as part of property transfer agreements (e.g., deed).”* Transfer of LUC monitoring to MRRA or another property owner, rather than to a regulatory authority, is inappropriate. How will the Navy be sure that annual inspections will be done? The LUC language says *“Should a subsequent owner of or a third party at the property associated with a Site fail to complete a required LUC implementation action for which such owner or party is responsible, EPA and the Navy will consult on the appropriate enforcement action.”*

Does this mean there is no procedure in place for enforcement?

It is not clear how or where an affected party could report violations of the LUCs. Is the public be able to report problems? Where do the police or the Town of Brunswick Code Enforcement Officer report violations?,

12. **Layering of Land Use Controls.** The draft LUCIP recommends a layering strategy of *mutually reinforcing controls*, but no layering of controls are proposed. The current strategy consists only of adding sites to DoD and local town registries, but these actions do not effectively limit or control land use activities on the sites. As noted in EPA’s guidance on Institutional Controls (EPA, 2012), informational devices such as notices in local and state registries can be useful, but are not enforceable devices.

As BACSE has stated repeatedly in discussions about LUCs and in our comments on the draft ESD. When remediation is ongoing or contamination remains in place it is of critical importance that this information be known and easily accessible to anyone accessing the property or inquiring about its condition. Without these measures in place, the risk of exposure to contaminated conditions is greatly enhanced. Land use controls should consist of an effective layering of restrictions to ensure that the nature and extent of contamination is fully known. Individual LUCs on separately-owned parcels specific to that parcel can lead to the development of a disparate mix of restrictions that are difficult to monitor and control. Furthermore, we have reason to believe that managing resources and protections through private documents between Navy and property owners has already failed to be protective of existing resources (see BACSE’s 14 February 2015 comment letter on the draft ESD LUCs).

Consistent with EPA guidance BACSE recommends that additional layers of enforceable land use Controls such as a Declaration of Covenants and Restriction, a Zoning Overlay, or a system of excavation permits be implemented. LUCs similar to those used on VRAP and Brownfield sites would provide effective layering and would substantially reduce the risk of human exposure to contaminants that remain at the former NASB.

13. **Maintaining Land Use Controls** The LUCIP says that the Land Use Controls will be reevaluated on a *regular basis*. The plan should specify the frequency of the reevaluation and how it will be documented. The LUCIP envisions that changes to the Land Use Controls may be recommended. What is the process for modifying the LUCIP and how will the public be notified and involved in reviewing any proposed changes to LUCs?
14. **Base-wide Groundwater Restriction:** According to the LUCIP *more than 80 percent of the base has been transferred out of Navy ownership*. The LUCIP says that *deeds for all parcels of former NAS Brunswick property that have been transferred out of Navy control have included a restriction on the use of groundwater...and the same restriction will be included for all parcels to be transferred in the future*. So now in addition to the sites no longer in Navy ownership, groundwater restrictions are proposed on the additional Sites 1 & 3, 2, 4, 7, 9 and 17 still under Navy ownership. If all the properties that have been and will be transferred out of Navy control have a groundwater restrictions, as well as Sites 1 & 3, 2, 4, 7, 9 and 17 why not establish a single groundwater management zone that encompasses the entire former base? This approach would be much easier to manage due to its simplicity, comprehensiveness and clarity. Consequently a single zone would be a more effective land use control because it would provide better protection to the public from exposure to contamination at the former base.

As discussed in the NASB Reuse Master Plan, “*one of the most significant data gaps is the lack of a base-wide groundwater model that evaluates existing IRP sites, their impact on the Eastern Plume, the nature and extent of groundwater contamination, and hydrologic interactions of surface water, alluvial groundwater, and bedrock groundwater*”. The NASB still lacks a comprehensive base-wide groundwater model of surface water/groundwater interaction and how contaminants may travel through these media. BACSE believes that until a more detailed and reliable model is constructed, base-wide groundwater restrictions should be in force. Lacking this tool it is difficult to see how the Navy and regulatory agencies will evaluate any proposed changes that could affect the hydrologic regime at the former base, as required in the LUCs. In addition, given the uncertainty about the nature, extent and potential health effects of PFCs that have recently been discovered at the base a base-wide restriction on groundwater use is necessary to prevent exposure.

### **CERCLA SITES INCLUDED IN THIS LUCIP**

15. LUC Remedial Designs for Sites 12 and 17 are not included in this draft LUCIP. The LUCIP recommends that until the final requirements for Site 17 groundwater are determined and documented via a ROD, LUCs should be implemented via a LUC ID. Again, implementation of a Base-wide groundwater restriction would cover Site 12 and 17 and eliminate the need for a separate groundwater management zone specified in the LUC ID for Site 17.

16. What about potential exposure at the former Skeet Range sites?

### **NON-CERCLA SITES INCLUDED IN THE LUCIP**

17. On page 3 of the LUCIP it states “*non-CERCLA sites for which LUC IDs will be prepared will be identified and added to the LUCIP on an as-needed basis*”. Land use controls associated with the former Base Instructions are no longer in effect. What protections are currently in place to prevent exposure to contaminants on the non-CERCLA sites? In 2013, in discussions between EPA, DEP and BACSE related to the LUCIP, the plan was to include land use controls for the Old Navy Fuel Farm and former Navy Exchange where there is residual petroleum contamination in the soil and groundwater. Why aren’t the non-CERCLA LUCs included in the 2015 Draft LUCIP?

### **ADDITIONAL INFORMATION**

18. **Base-wide Groundwater Restriction (page 3)** Although the title of this section implies that a Base-wide Groundwater Restriction is in place, it actually refers to separate deed restrictions on individual properties that don’t comprise a comprehensive contiguous groundwater restriction zone. No controls are in place to protect monitoring wells located outside of the CERCLA sites. The groundwater restriction purportedly prevents impacts to existing groundwater flow directions, but in fact only groundwater withdrawal is prohibited. The LUCs place no restriction on discharge into the groundwater (e.g., septic systems, irrigation, discharge of storm water or process water) which could impact the hydrology or even introduce new contamination. This concern has been a topic of discussion for years at technical meetings related to the clean-up of the former base. The proposed LUCs place no restrictions to prevent significant groundwater discharge that could alter the direction or rates of groundwater flow, potentially causing the contamination to spread beyond the current extent. Discharge to the surface and groundwater could also impact the effectiveness of groundwater remedies if new groundwater forces act to move the contamination outside of the capture zone of the extraction wells or to raise water levels beneath capped landfills. It is essential that the Groundwater Management Zone restrict both withdrawal and discharge of groundwater at the base.

### **Town of Brunswick Comprehensive Zoning Ordinance Update**

The reference to the Town of Brunswick Zoning Update as a LUC is problematic for several reasons:

- a. The referenced ordinance is proposed, but has not been enacted.
- b. The proposed ordinance represents a notification process only, it does not control any land use activities.
- c. Many land use activities do not require development review or a building permit.
- d. The proposed ordinance includes significant exemptions that apply to Brunswick Landing.
- e. The Navy appears to be shifting the responsibility - and costs – of managing the disparate and complex array of land use controls to the Town of Brunswick.

19. **The proposed Zoning has not been enacted.** The LUCIP assumes the Town will adopt a zoning ordinance with the proposed language, despite extensive delays and indications of lack of public support for the zoning revision. There is nothing in the existing Town of Brunswick Zoning that specifically addresses land use controls at the former base and this proposed zoning update cannot be considered in effect at this time. How, then, can the Navy say in this document “Verification that the ordinance remains in effect will be completed as part of the annual inspection process” when the ordinance has not been adopted and is not in effect now? Neither the Navy nor the regulatory agencies have any control over the adoption of updated zoning or amendments by the Town of Brunswick. What if the ordinance passes and then is amended or withdrawn?
20. **The proposed Zoning ordinance represents a notification process only.** The reference to the updated zoning ordinance is misleading. No zoning overlay addressing soil or groundwater restrictions is included in the proposed revised ordinance. BACSE believes the objective of the LUCs should include a layered approach to land use control and enforcement. The Navy should provide an overlay of groundwater and soil management zone boundaries to Town of Brunswick Planning Board and request that an overlay be incorporated into the Brunswick Zoning Ordinance. Again BACSE recommend a Groundwater Management Zone that encompasses the entire NASB. If the Town of Brunswick is not willing to implement a groundwater restriction overlay, then the Navy and DEP should implement a Base-Wide restriction over the entire NASB.
21. **Numerous land use activities do not require a development review or building permit.** Consequently future land use activities that have the potential to expose the public to contamination may go forward without local notification or review. For example, there is no process in place in the Town’s current (or proposed) land use ordinances or the State law requiring a permit to drill a water supply well. What safeguards are in place to prevent a property owner from, knowingly or unknowingly, drilling a well on the former base? Many other former military bases have local restrictions in place, in the form of base-wide restrictions or mandatory well permits that help to minimize the risk of exposure. Similarly, no local review or permits are required for small scale agricultural land use or irrigation for agricultural or landscaping applications. Are these activities permitted? Although soil excavation or disturbance may be prohibited in the deed restrictions on a property, there is no process in place or in the proposed ordinance that requires a permit be obtained prior to small scale soil excavation on the former base. Ironically, prior to 2011, when the base was still under Navy control, inhabitants of the base were protected from exposure through the Base Instructions which required review and approval by Navy personnel prior to any subsurface digging. Shouldn’t future inhabitants of the base be afforded the same protections?

22. **Exemption from Development Review** The level of scrutiny at Brunswick Landing is open to question, since the current ordinance *exempts* (emphasis ours) re-use of buildings at Brunswick Landing from development review:

**402.3 Activities not Subject to Development Review:**

5) *The initial non-military re-occupancy of a building in the NASB Reuse District existing as of the July 20, 2009 adoption of this provision provided all of the following are met:*

- a) The new use is a permitted use in the Reuse Land / Use District in which it is located, per the NASB Reuse Master Plan, approved December 2007,*
- b) The re-occupancy maintains the pre-existing pattern of use of the site including the general location of the building and parking and service areas,*
- c) The usable floor area of the building is not increased by more than two thousand (2,000) square feet, within the existing building footprint,*
- d) The amount of impervious surface on the project site is not increased by more than two thousand (2,000) square feet,*
- e) There is adequate parking available for the new use in accordance with Section 512,*
- f) The re-occupancy of the building will not change the primary use of the building from residential to non-residential or from non-residential to residential,*
- g) The initial non-military re-occupancy of a building shall not be considered a change of use even if it does not meet the vacancy time limits of Section 702.1. All subsequent re-occupancy of buildings in the NASB Reuse District shall be subject to the change of use review requirements of Sections 402 and 702 of this ordinance as applicable,*

*6) The change of use of a building in the NASB Reuse District with less than 10,000 square feet of floor area following its initial non-military occupancy provided that the new use does not significantly intensify the use of the property compared to its previous use. A new use that increases the required off-street parking in accordance with Sections 512.1 or 512.2 by more than twenty percent (20%) or that increases the number of peak hour vehicle trips based upon the current edition of the ITE Trip Generation Manual, as amended, by more than twenty percent (20%) or that meets any of the review thresholds of Section 702.3 shall be considered to significantly intensify the use. If the Codes Enforcement Officer determines that there will be a significant intensification of the use, the activity shall be deemed to be a minor development subject to development review in accordance with Section 402.1.*

*B. Activities not subject to development review still require appropriate permits issued by the Codes Enforcement Officer and/or the Village Review Board if the property is in the Village Review Zone.*

23. **Shifting of Responsibility and Cost.** The LUCIP suggests that the Town will play in active role in monitoring the LUCs “*the town will ensure compliance with implemented LUCs by requiring all applicants to provide copies of property conveyance documents that list the applicable LUCs for the property and then confirming that the proposed actions are in compliance with the LUCs*” The LUCIP says that because all development activities at Brunswick Landing will be subject to review by either the development review process or a building permit, the proposed ordinance *will allow confirmation of compliance with implemented LUCs*. First of all a notification or review process does not ensure compliance with the LUCs. The LUCIP also says that the town will maintain and update the boundaries of the LUCs and detailed deed restrictions in its MUNIS and GIS databases. What if the Town doesn’t have the resources to manage these systems in the future?

The ESD and draft LUCIP indicate that the Navy is responsible for implementing, inspecting, reporting and enforcing the intuitional controls, but it appears that they are expecting the Town of Brunswick to absorb much of the cost and burden of implementing, inspecting, reporting and enforcing these LUCs. What are the long-term costs to the Town of dealing with these LUCs and isn't the Navy, as the party responsible for the contamination, responsible for these costs?

Based on this description in the LUCIP, the enforcement responsibility for LUCs is not clear. If it adopts the proposed Zoning Ordinance update is the Town of Brunswick's Planning Board and Code Enforcement Officer responsible for LUC compliance? Do they have the expertise to provide this oversight? What are the consequences if the Town approves a land use activity that results in an exposure to contamination or compromises the remedy?

### **Table 1 Former NAS Layering Strategy**

Detailed comments on Table 1 – Former NAS Layer Strategy are provided as suggested edits in red and the edited table is included as an attachment to this letter. Also attached is a copy of the table entitled *Table 1 - Land Use Control Information Sites 1, 2,3,4,7 and Eastern Plume* dated March 25, 2013. This table contains detailed information on Land Use Control (LUC) objectives, media of concern and proposed restrictions and reflects the collective input of collaboration between the Navy, EPA, MDEP and BACSE on LUC. Despite this collective effort neither the ESD nor the LUCIP **Table 1 –Former NAS Layering Strategy** incorporates much of this essential information.

Additional comments on *Table 1- Former NASB Layering Strategy* are as follows:

24. Table 1 should address each of the sites separately rather than combining the objectives for multiple sites with different RODs, types of contamination, land uses and remedial actions as it currently presented on Table 1.
25. The LUCIP and Table 1 lack the following:
  - A site-specific listing of the impacted media and associated contaminants of concern.
  - Information on risk exposure assumptions in relation to anticipated land uses. How are the LUCs related to current and future land use? What land uses are permitted and what are prohibited?
  - What about dermal exposure in surface water and sediments?
  - Requirements for signs ? Fencing ?
26. Why do the LUCs specify “uncontrolled human exposure”? BACSE recommends just human exposure.
27. Define **residential land use**. Office use may allow on-site day-care facilities. Should some other uses also be prohibited?
28. Concerns about vapor migration refer only to **future** habitable structures, but what about vapor intrusion issues that may occur in existing habitable structures? How will they be addressed?

29. The LUCs identify the need to protect current and future remedial system components. Engineering controls such as landfill caps, slurry walls and storm water systems should be accurately located and depicted on the LUC map. A table listing the name and coordinate location of monitoring wells that are part of LTM monitoring program for each site should be included in the LUCIP. These monitoring points should be shown accurately on the LUC map for each site, along with any related LTM monitoring points located outside of the LUC boundary. Extraneous sample points and other features should be removed from the maps.
  
30. Has the proposed Town of Brunswick Zoning Map been evaluated in relation to the proposed LUC restrictions? The Growth Mixed-Use 7 (GM7) District is intended to provide a compact pedestrian-oriented mix of uses at Brunswick Landing. This District accommodates and encourages a range of uses—such as neighborhood-scale retail, professional offices, business and support services, restaurants, hotels and conference centers, health and fitness centers, day care centers and a residential uses. PFCs have been detected adjacent to the GM7 zone. What happens to the GM7 zone boundary if the Groundwater Management Zone needs to be expanded to encompass this area?

#### **Appendix A1 Land Use Control Remedial Design for Sites 1-3, 2 and Eastern Plume**

31. As mentioned these combined sites have different remedies, objectives and contaminants. As mentioned in comment 24 each site should be discussed separately so the specifics can be retained.
  
32. Background and Site Descriptions: What are the risks associated with Site 1 & 3; Site 2; Eastern Plume?
  
33. Background and Site Descriptions: In the discussion of the Eastern Plume the reference to discharge to the publicly owned treatment works is misleading. In December 2000, an ESD for the Eastern Plume altered the original GWETS to remove the ultraviolet oxidation system and replace it with an air stripping system with carbon polishing and to replace discharge to the Brunswick Sewer District with discharge to an infiltration gallery. The updated treatment system went on line in January 2001, and the infiltration gallery began operating in February 2002. The current treatment train is not properly described. As described in the 2010 ESD for the Eastern Plume the GWETS was modified to incorporate a HiPOx® Hydraulic Control Unit (HCU) that uses a patented ozone and hydrogen peroxide advanced oxidation process to break down dissolved-phase VOCs and 1-4 dioxane into non-hazardous end products. Please provide an accurate history and description of the GWETS.
  
34. Background and Site Descriptions: The last paragraph in this section “*In December 2000 an ESD..*” should be re-written to include the specific changes that triggered the Explanation of Significant Differences in 2000 and 2010. The current set up of the treatment system should be clearly outlined in this section including the number and location of extraction wells, the flow rate, contaminants in the influent and effluent and the associated LTM network for the Eastern Plume.
  
35. 3.0 Land Use Controls: How do the proposed LUCs ensure that any remaining contaminants do not pose an unacceptable risk to the environment?

36. 3.0 Land Use Controls: There is no reference to the 2015 Multi-site ESD in this discussion. It should be added to this section.
37. 3.0 Land Use Controls: Are agricultural uses allowed in the soil management zone?
38. 4.0 Land Use Control Implementation: Items 1 through 5 outlined in this section represent recording and notification activities none of which are enforceable controls. The updated Zoning Ordinance is not in effect and cannot be verified nor is there any guarantee that it will be in the future.

Report and notify – shouldn't the Town of Brunswick be included in the reporting and notification related to the LUCs?

What is the process for terminating a LUC and how is the public notified and able to provide input?

Site Inspections: Responsibility for annual inspections may be transferred to the future property owners which becomes a form of self-reporting. This is unacceptable. Since the Navy is ultimately responsible for the integrity of the LUCs, inspections should be done by regulatory agency staff or by qualified individuals employed by or contracted through the Navy.

39. 4.0 Land Use Control Implementation: What has the Navy done to date to notify adjacent property owners that their property has been impacted by the Eastern Plume? How has the vertical and lateral extent of the off-site contamination been verified? The Navy has had plenty of time to pursue establishing LUCs for the contaminated groundwater that extends beyond the base boundary onto private property. BACSE considers this LUCIP is incomplete without LUCs on the portion of the Eastern Plume extending beyond the former NASB boundary.

The Navy says they will make a “good faith effort”? This sounds very non-committal. Similar to other DoD sites the Navy should actively pursue a coordinated effort working with the DEP and the Town of Brunswick, to enact protective LUCs related to the contamination that has impacted properties beyond the base boundary.

What efforts is the Navy taking to restore the groundwater in this location?

How will property owners be compensated for their loss?

40. A1-1 Map

What is the basis for the LUC boundaries depicted on the Figures A1-1A, A1-A2, and A1-A3 in the LUCIP? As BACSE stated in previous comments on the draft ESD, the basis for the LUC boundaries should be referenced to a specific source document and date.

The Soil Management Zone is not co-extensive with the Eastern Plume and Picnic Pond. What are the risks associated with the soils and sediments in the EP/ Picnic Pond area? Are the soil and sediments safe for gardening or excavation in all areas outside of the Soil Management Zone?

41. Attachment A1-2 Survey Data  
These data are missing from the draft report.

#### **Appendix A2 – Land Use Control Remedial Design for Site 4- Building 584 Acid/Caustic Pit**

42. According to Figure A1-1B, Site 4 is subject to the groundwater restrictions associated with the groundwater management zone attributed to Sites 1, 2, 3 and EP Groundwater Management Zone, but this is not mentioned in the either LUC-RD or Table 1 in the LUCIP. Although it appears on the figure A2-1, a cross-reference is needed.
43. Annual inspections are delegated to the future property owner for Site 4. How will the Navy enforce this? The LUC says: *“Should a subsequent owner of or a third party at the property associated with Site 4 fail to complete a required LUC implementation action for which such owner or party is responsible, EPA and the Navy will consult on the appropriate enforcement action,”* which implies there is no penalty and no enforcement mechanism.
44. Attachment A2-2 Survey Data  
These data are missing from the draft report.

#### **Appendix A3 Land Use Control Remedial Design for Site 7 – Old Caustic /Acid Pit**

45. How were the LUC boundaries determined given that soil remediation and testing at Site 7 is not complete?
46. The term “monitoring” is used in the objectives, but not in the LUC language. The LUC says: *“protect the integrity of all current and future remedial systems.”* Protecting monitoring wells should be included.
47. Unexpectedly, munitions were recently discovered at Site 7 – How might this discovery impact the nature and extent LUCs for Site 7?
48. Attachment A2-2 Survey Data  
These data are missing from the draft report.

#### **Appendix A4- Land Use control Remedial Design for Site 9 – Neptune Drive Disposal Site**

49. The Background section in Appendix A4 states *“interim ROD signed in 1994 documented the selection of natural attenuation”* without mentioning that the site was the location of barracks that were demolished, and the ROD required a change in remedy after demolition of the buildings. Excavation of the ash landfill, the discovery of hazardous soils, the need to treat the water accumulated in the excavation, and the rest of the multi-year process to address site contamination are not mentioned. This section should be re-written to accurately describe the site history.

50. A4-1 Map

There are a number of unresolved issues with Site 9 especially in relation to the lateral extent of the waste contamination. No LUC boundary is depicted on Figure A4-1 or identified in the legend. How can this LUC RD be prepared if the LUC boundary is not defined? Does contamination extend to the adjacent area transferred to the Town of Brunswick?

**Appendix A5 – Land Use Control Remedial Design Site 12**

51. No information on the proposed LUC RD for Site 12 is presented in this draft LUCIP.

**Appendix A6 – Land Use Control Remedial Design Site 17 Groundwater**

52. No information on the proposed LUC RD for Site 17 is presented in this draft LUCIP.

**Appendix B1 – Land Use Control Implementation Document for Site 17 Groundwater**

53. Why is Site 17 the only site for which a LUC ID has been prepared? When will controls be developed for the other sites on the former NASB with petroleum contamination?
54. The LUC-ID Land Use Controls, in the last bullet of section 3.0, should state: “Protect the integrity of all current and future remedial and monitoring systems.”
55. The specific contaminants of concern for Site 17 should be identified in the LUCIP.

**Table 1- BACSE Comments  
1 September 2015**

SITE	MEDIA AFFECTED	LUC OBJECTIVES	LUCs	LUC IMPLEMENTATION ACTIONS			
				Real Property/Legal	Governmental/ Administrative	Site Controls	Other
<p><b>Combined Sites 1, 2, 3, and Eastern Plume</b></p> <p><i>These sites should be separated due to different ROD objectives, impacted media and COC</i></p>	<p>Soil – Sites 1, 2, and 3 and Eastern Plume infiltration gallery (former Site 11)</p> <p>Groundwater – Sites 1, 2, and 3 and Eastern Plume.</p> <p><i>What about surface water &amp; seeps ?</i></p> <p><i>What about sediments ?</i></p> <p><i>Should include a list of COC.</i></p>	<p>Prevent uncontrolled human exposure to and/or use of groundwater within groundwater management zone (GMZ)</p> <p>Prevent unacceptable human exposure to volatile vapors potentially migrating to indoor air of future habitable structures within GMZ.</p> <p><i>What about existing habitable structures in this zone ?</i></p> <p>Prevent changes in hydrology within GMZ that have potential to negatively impact nature and extent of delineated groundwater contamination – <i>such as groundwater discharge?</i></p> <p>Manage future construction activities within soil management zones (SMZ) and GMZ to prevent uncontrolled human exposure to and/or transport/migration of contaminated soil and groundwater</p> <p>Prevent uncontrolled human exposure to and/or use of surface and subsurface soils within SMZ</p> <p>Protect integrity and operation of all landfill cap/cover and remediation and monitoring systems/components within SMZ and GMZ</p>	<p><u>Soil Management Zone</u> Prohibit residential land use <i>Define “residential use”.</i></p> <p>• <i>Does proposed TOB zoning prohibit residential development in the entire GMZ and SMZ ?</i></p> <p>Prohibit soil excavation/disturbance or any construction activities not associated with monitoring, maintenance, or other necessary remedial actions within SMZ to protect landfill cap/cover, slurry wall, and supporting stormwater management ditches and retaining basin</p> <p><i>All remedial structures that need to be protected should be accurately located and shown on LUC map</i></p> <p>• <i>Does stormwater refer to local systems or the whole base; the of the system extent should be shown on LUC map</i></p> <p>Protect integrity of all current and future remedial systems/components</p> <p><u>Groundwater Management Zone</u> Prohibit all uses of groundwater underlying GMZ except for investigative and remedial purposes without prior written approval</p> <p>Protect integrity of all current and future remedial systems/ components</p> <p>Prohibit construction of habitable structures without prior written approval and without evaluation and potential mitigation of vapor intrusion.</p>	<p>Enter LUCs into Navy’s LUC Tracker Database</p> <p>Submit map showing LUC areas to NAVFAC Mid-Atlantic’s real estate division</p> <p>Implement Deed Restrictive Covenants at time of property transfer.</p> <p><i>What LUC are in place if property is not transferred?</i></p> <p><i>Should include State of Maine Declaration of Covenant and Restrictions.</i></p> <p><i>Should include Registration of GMZ and SMZ with Dig Safe or establishment of a similar permit system.</i></p>	<p>Submit GMZ/SMZ boundary maps and accompanying legal descriptions to Town of Brunswick Planning &amp; Development Department for inclusion in their Codes Enforcement MUNIS® database.</p> <p>Submit GMZ/SMZ boundaries and associated restrictions to Town of Brunswick Planning &amp; Development Department for incorporation into Town of Brunswick GIS</p> <p>Submit LUCIP/LUC RDs to Town of Brunswick Planning &amp; Development Department as additional materials to be referenced in updated Zoning Ordinance</p> <p><i>These actions represent, at best, notification only, These systems are operated and maintained by the TOB, are not legally required to be maintained, and may not be in place in the future.</i></p> <p><i>Shifts the cost of tracking/ notification to town.</i></p> <p><i>How is this protective? LUCIP in its current form is very vague and not easily understood by the public</i></p> <p>For Eastern Plume only, negotiate with property owners impacted by off-base groundwater contamination to reach agreement not to use groundwater</p> <p><i>The Maine DEP, the Town of Brunswick and BACSE should work cooperatively with property owners east of the base to implement groundwater restrictions. This effort may require that the Navy compensate the property owner for damages.</i></p>	<p>Maintain signs at Sites 1 and 3 and Site 2</p> <p>Maintain fence at Site 2</p> <p><i>Signage ?</i></p>	<p>Provide LUCIP and follow-on LUC notification and reinforcement letters to future property owners encumbered by GMZ/SMZ. <i>Who is responsible for this ? The LUCIP, in its current form is not useful for the public.</i></p> <p>Conduct annual inspections, interview, submit annual compliance letters, and complete annual reporting.</p> <p><i>Who is responsible for this ? A lot can happen in a year; What about violations, enforcement</i></p>

**Table 1- BACSE Comments  
1 September 2015**

<p><b>Site 4</b></p>	<p>NA</p> <p><i>Should state that none have been identified to date but contamination is suspected under Building 584.</i></p> <p><i>Specified in ROD " If the building is ever removed, further investigations or remedial actions may be required",</i></p>	<p>Prevent uncontrolled human exposure to subsurface soil beneath Building 584</p> <p><i>Potential for GW contamination is unknown. Even though the site is contained within proposed GMZ it should be explicitly stated that GW restrictions apply</i></p>	<p>Prohibit removal or alteration of Building 584 floor unless prior written approval is obtained.</p> <p><i>Boundary - Need buffer around building 584. From whom; what is the process?</i></p>	<p>Enter LUCs into Navy's LUC Tracker Database</p> <p>Submit map showing LUC areas to NAVFAC Mid-Atlantic's real estate division</p> <p>Implement Deed Restrictive Covenants at time of property transfer.</p> <p><i>What LUC are in place and effective now if property is not transferred?</i></p> <p><i>Should include State of Maine Declaration of Covenant and Restrictions.</i></p> <p><i>Should include Registration of SMZ with Dig Safe or establishment of a similar permit system.</i></p>	<p>Submit a land use restriction boundary map and accompanying legal description to Town of Brunswick Planning &amp; Development Department for inclusion in their Codes Enforcement MUNIS® database</p> <p>Submit LUC boundaries and associated restriction to Town of Brunswick Planning &amp; Development Department for incorporation into Town of Brunswick GIS</p> <p>Submit LUCIP/LUC RDs to Town of Brunswick Planning &amp; Development Department as additional materials to be referenced in updated Zoning Ordinance</p> <p><i>These actions represent, at best, notification only. No guarantee they will be maintained. These systems are operated and maintained by the TOB, are not legally required to be maintained, and may not be in place in the future.</i></p> <p><i>Shifts the cost of tracking/ notification to town.</i></p>	<p>None</p> <p><i>Presence of the Building. If the building is demolished, unauthorized excavation is a potential risk</i></p>	<p>Provide LUCIP and follow-on LUC notification and reinforcement letters to future property owners encumbered by land use restriction</p> <p><i>Who is responsible for this ? The LUCIP, in its current form is not useful for the public.</i></p> <p>Conduct annual inspections, interviews, submit annual compliance letters, and complete annual reporting*</p> <p><i>Who is responsible for this ? A lot can happen in a year; What about violations, enforcement</i></p>
----------------------	---	---	--	--	--	--	--

**Table 1- BACSE Comments  
1 September 2015**

SITE	MEDIA AFFECTED	LUC OBJECTIVES	LUCs	LUC IMPLEMENTATION		NS	
				Real Property/Legal	Governmental/	Site Controls	Other
Site 7	Soil and groundwater  <i>Should include a list of COCs.</i>	Prevent uncontrolled human exposure to and/or use of groundwater  Manage future construction activities to prevent uncontrolled human exposure to and/or transport /migration of contaminated soil and groundwater  Prevent uncontrolled human exposure to and/or use of surface and subsurface soils  Protect active and future remediation and monitoring systems	Prohibit residential use of site without prior written approval. <i>Define "residential use".</i>  <i>Proposed TOB zoning should reflect LUC restriction. Site is zoned GM-7 in proposed TOB zoning allowing daycare centers &amp; residential use.</i>  Prohibit soil excavation/disturbance or any construction activities without prior written approval <i>From whom; what is the process?</i>  Prohibit all uses of groundwater underlying the site without prior written approval <i>From whom; what is the process?</i>  Protect the integrity of all current and future remedial systems	Enter LUCs into Navy's LUC Tracker Database  Submit map showing LUC areas to NAVFAC Mid-Atlantic's real estate division  Implement Deed Restrictive Covenants at time of property transfer.  <i>What LUC are in place and effective now if property is not transferred?</i>  <i>Should include State of Maine Declaration of Covenant and Restrictions.</i>  <i>Should include Registration of SMZ with Dig Safe or establishment of a similar permit system.</i>	Submit a groundwater and land use restriction boundary map and accompanying legal description to Town of Brunswick Planning & Development Department for inclusion in their Codes Enforcement MUNIS® database  Submit LUC boundaries and associated groundwater and land use restrictions to Town of Brunswick Planning & Development Department for incorporation into Town of Brunswick GIS  Submit LUCIP/LUC RDs to Town of Brunswick Planning & Development Department as additional materials to be referenced in updated Zoning Ordinance  <i>These actions represent, at best, notification only. No guarantee they will be maintained. These systems are operated and maintained by the TOB, are not legally required to be maintained, and may not be in place in the future.</i>  <i>Shifts the cost of tracking/ notification to town.</i>	None  <i>Site controls should include signs &amp; a fence</i>	Provide LUCIP and follow-on LUC notification and reinforcement letters to future property owners encumbered by land use restrictions <i>Who is responsible for this ?</i> <i>The LUCIP, in its current form is not useful for the public.</i>  Conduct annual inspections, interviews, submit annual compliance letters, and complete annual rep <i>Who is responsible for this ?</i>  <i>A lot can happen in a year; What about violations, enforcement</i>

**Table 1- BACSE Comments  
1 September 2015**

<p><b>Site 9</b></p>	<p>Soil and groundwater</p> <p><i>Should include a list of COCs.</i></p>	<p>Prevent uncontrolled human exposure to and/or use of groundwater</p> <p>Manage future construction activities to prevent uncontrolled human exposure to and/or transport/migration of contaminated soil and groundwater</p> <p>Prevent uncontrolled human exposure to and/or use of surface and subsurface soils/ash</p> <p>Protect active and future remediation and monitoring systems</p>	<p><i>How were LUC boundaries established?</i></p> <p>Prohibit residential use of site without prior written approval <i>Define "residential use".</i></p> <p><i>Proposed TOB zoning should reflect LUC restriction.</i></p> <p>Prohibit soil excavation/disturbance or any construction activities without prior written approval - <i>From whom; what is the process?</i></p> <p>Prohibit all uses of groundwater underlying the site without prior written approval - <i>From whom; what is the process?</i></p> <p>Protect the integrity of all current and future remedial systems</p>	<p>Enter LUCs into Navy's LUC Tracker Database</p> <p>Submit map showing LUC areas to NAVFAC Mid-Atlantic's real estate division</p> <p>Implement Deed Restrictive Covenants at time of property transfer</p> <p><i>What LUC are in place and effective now if property is not transferred?</i></p>	<p>Submit a groundwater and land use restriction boundary map and accompanying legal description to Town of Brunswick Planning &amp; Development Department for inclusion in their Codes Enforcement MUNIS® database</p> <p>Submit LUC boundaries and associated groundwater and land use restrictions to Town of Brunswick Planning &amp; Development Department for incorporation into Town of Brunswick GIS</p> <p>Submit LUCIP/LUC RDs to Town of Brunswick Planning &amp; Development Department as additional materials to be referenced in updated Zoning Ordinance</p> <p><i>These actions represent, at best, notification only, No guarantee they will be maintained. These systems are operated and maintained by the TOB, are not legally required to be maintained, and may not be in place in the future.</i></p> <p><i>Shifts the cost of tracking/ notification to town.</i></p>	<p>None</p>	<p>Provide LUCIP and follow-on LUC notification and reinforcement letters to future property owners encumbered by land use restriction <i>Who is responsible for this ?</i> <i>The LUCIP, in its current form is not useful for the public.</i></p> <p>Conduct annual inspections, interviews, submit annual compliance letters, and complete</p>
----------------------	--	---	---	---	--	-------------	---

“Prior written approval” means prior written approval from the Navy, EPA, and MEDEP.  
 For all sites, inspections will include confirmation of the continuation of implementation actions (e.g., confirming that NAS Brunswick Zoning Ordinance is still in effect, confirming that any revised LUCs/LUC boundaries have been provided to applicable Navy and Town of Brunswick departments, sending LUC/IC notification and reinforcement letters to any new adjacent property owners encumbered by GMZ/SMZ).  
 \* Annual inspections will be conducted by the Navy until procedural responsibilities are transferred to subsequent property owners. *Transfer of monitoring to property owner is inappropriate and provides no independent checks on LUC.*

Land Use Control Information

April 4, 2014

**Land Use Control Information**  
**Sites 1 and 3, 2, 4, 7, and Eastern Plume**  
March 25/April 4, 20123 DRAFT

SITE	MEDIA AND ASSOCIATED CONTAMINANTS OF CONCERN	UNACCEPTABLE RISKS REQUIRING REMEDIAL ACTION	SUMMARY OF CERCLA RECORD OF DECISION (ROD) REMEDY	INSTITUTIONAL CONTROL REQUIREMENTS/LUC OBJECTIVES	PROPOSED PROHIBITIONS	<u>POSSIBLE</u> LUC IMPLEMENTATION ACTIONS (for discussion only)
<p><b>Sites 1&amp;3*</b></p> <p>(Orion Street Landfill – North and Hazardous Waste Burial Area)</p>	<p><b>Groundwater</b> - Metals, VOCs, Petroleum</p> <p><b>Sediment</b> - Metals, PAHs, VOCs,</p> <p><b>Leachate Seeps</b> - Metals, Pesticides, VOCs</p> <p><b>Surface Water</b> - Metals</p> <p><b>Surface Soils</b> - Metals, Pesticides, PAHs, VOCs <u>Add PCBs (see pg 8 of ROD)</u></p> <p><b>Subsurface Soils</b> - Metals, SVOCs, Pesticides, PCBs</p>	<p>Residential exposure to surface soil, surface water, sediment, leachate, leachate sediments, and groundwater</p> <p><u>Ecological Exposure to mercury in leachate soil/sediment (see Table 4, pg 41, for proposed cleanup level for the sites)</u></p>	<p><b>1992 ROD</b></p> <ul style="list-style-type: none"> <li>• Containment of waste</li> <li>• Management of migration of the contaminated groundwater</li> <li>• Environmental monitoring</li> <li>• Five-Year Reviews</li> <li>• Institutional Controls</li> </ul>	<p><b>IC and LU Restrictions (page 52 of ROD)</b></p> <ul style="list-style-type: none"> <li>• Prevent future use of the landfills [or] groundwater</li> <li>• Security-within fenced area</li> <li>• Signage warning of buried pesticides, - around landfill &amp; near leachate seeps</li> <li>• Incorporate restriction into Operating Instructions</li> </ul> <p><b>Clarified LUC Objectives per Draft ESD</b></p> <ul style="list-style-type: none"> <li>• Prevent uncontrolled exposure and/or use of groundwater within groundwater management zone (GMZ)</li> <li>• Prevent unacceptable exposure to volatile vapors potentially migrating to indoor air of future habitable structures within GMZ</li> <li>• Prevent changes in hydrology within GMZ that have potential to negatively impact nature and extent of groundwater contamination <u>and the remedy.</u></li> <li>• Manage construction activities in soil management zone (SMZ) and GMZ</li> <li>• Prevent uncontrolled exposure to and/or use of surface and subsurface soils within SMZ</li> <li>• Protect integrity and operation of all landfill cap and remediation and monitoring systems within SMZ and GMZ</li> </ul>	<p><u>The entries in this column are a mix of prohibited and desired activities. They should be one or the other if the “Prohibitions” header is retained. Otherwise, some editing is required.</u></p> <p><b>Based on ROD Risks and ESD Objectives</b> <u>Soil Management Zone</u></p> <ul style="list-style-type: none"> <li>• Residential land use</li> <li>• Soil excavation/disturbance or any construction activities not associated with monitoring, maintenance, or other necessary remedial actions within SMZ to protect landfill cap, slurry wall, and supporting stormwater management ditches and retaining basin</li> <li>• Protect integrity of all current and future remedial systems <u>This is not a prohibited activity.</u></li> </ul> <p><u>Groundwater Management Zone</u></p> <ul style="list-style-type: none"> <li>• All uses of groundwater underlying GMZ without prior written approval</li> <li>• Protect integrity of all current and future remedial systems</li> <li>• Construction of habitable structures without evaluation and potential mitigation of vapor intrusion without prior written approval</li> </ul> <p><b>Additional MEDEP Proposed Restrictions</b></p> <ul style="list-style-type: none"> <li>• All other uses of the site without approval</li> <li>• Unrestricted access</li> </ul> <p><i>Note:</i> It was assumed that all of the originally listed prohibitions [disturbance of monitoring wells, remedial systems (including the landfill cover, drainage system, extraction well, gas vents, slurry wall), concrete survey monuments, wetlands, seeps, and streams, and surface/subsurface soils and sediments] are addressed by the last two soil restrictions listed above. <u>The protection of wetlands, seeps, and streams, as well as appropriate buffers around them, should be specified in this column.</u></p>	<p><b>Real Property/Legal</b></p> <ul style="list-style-type: none"> <li>• Deed Restrictive Covenants</li> <li>• State of Maine Declaration of Environmental Covenant (UECA)</li> </ul> <p><b>Governmental/Administrative</b></p> <ul style="list-style-type: none"> <li>• Navy registration of GMZ/SMZs with DigSafe.</li> <li>• Submit GMZ/SMZ boundary maps and accompanying legal descriptions to Town of Brunswick Planning Board for inclusion into their Planning Department Codes Enforcement MUNIS® database</li> <li>• Submit an overlay of GMZ/SMZ boundaries to Town of Brunswick Planning Board and request that overlay be incorporated into NAS Brunswick Zoning Ordinance</li> </ul> <p><b>Site Controls</b></p> <p>Sign posting</p> <p><u>Fencing</u></p> <p><b>Other</b></p> <ul style="list-style-type: none"> <li>• LUC/IC notification and reinforcement letters to current/future property owners encumbered by GMZ/SMZs.</li> <li>• Annual inspections</li> </ul>
<p><b>Site 2*</b></p> <p><u>Please note that BACSE's 2/13 comments have not</u></p>	<p><b>Groundwater</b> - Lead</p> <p><b>Leachate Seeps</b> - Metals, Pesticides,</p>	<p>None identified in ROD <u>Lead exceeded the MCL in groundwater (see page 13 of ROD)</u></p>	<p><b>1998 ROD</b></p> <ul style="list-style-type: none"> <li>• Surface debris removal</li> <li>• Environmental Monitoring</li> <li>• Five-Year Reviews</li> </ul>	<p><b>ICs (page 16 of ROD)</b></p> <ul style="list-style-type: none"> <li>• Maintenance of existing fence</li> <li>• Signage around perimeter and near leachate seeps</li> <li>• Restrictions - review for development</li> <li>• Document in Operating Instructions</li> </ul>	<p><b>Based ESD Objectives</b> <u>Soil Management Zone</u></p> <ul style="list-style-type: none"> <li>• Residential land use</li> <li>• Soil excavation/disturbance or any construction activities not associated with monitoring, maintenance, or other necessary remedial actions</li> </ul>	<p>Same as for Sites 1 and 3</p> <p><u>Fencing</u></p>

SITE	MEDIA AND ASSOCIATED CONTAMINANTS OF CONCERN	UNACCEPTABLE RISKS REQUIRING REMEDIAL ACTION	SUMMARY OF CERCLA RECORD OF DECISION (ROD) REMEDY	INSTITUTIONAL CONTROL REQUIREMENTS/LUC OBJECTIVES	PROPOSED PROHIBITIONS	<u>POSSIBLE LUC IMPLEMENTATION ACTIONS</u> (for discussion only)
<p><a href="#">been answered, including that Site 2 is not yet bounded in one corner.</a> (Orion Street Landfill - South)</p>	<p><i>Note:</i> Because no unacceptable risks were identified in the ROD, no CERCLA COCs were identified in the ROD.</p>		<ul style="list-style-type: none"> <li>Institutional Controls</li> <li>Additional monitoring well</li> <li>Modifications to selected remedy, if necessary</li> </ul>	<ul style="list-style-type: none"> <li>Closure/transfer restrictions to limit future development (Objective - prevent disturbance of buried waste and extraction or use of groundwater without approval)</li> </ul> <p><b>Clarified LUC Objectives per Draft ESD</b> Same as for Sites 1 and 3</p>	<p>within soil management zone to protect soil cover</p> <ul style="list-style-type: none"> <li>Protect integrity of all current and future remedial systems</li> </ul> <p><u>Groundwater Management Zone</u></p> <ul style="list-style-type: none"> <li>All uses of groundwater underlying groundwater restriction zone without prior written approval</li> <li>Protect integrity of all current and future remedial systems</li> </ul> <p><b>Additional MEDEP Proposed Restrictions</b></p> <ul style="list-style-type: none"> <li>All other uses of the site without approval</li> <li>Disturbance of wetlands, seeps, and streams <u>The protection of wetlands, seeps, and streams, as well as appropriate buffers around them, should be specified in this column.</u></li> <li>Disturbance of surface/subsurface soils and sediments</li> <li>Unrestricted access</li> </ul>	
<p><b>Site 4*</b> (Acid/Caustic Pit) <a href="#">Please see BACSE's 2/18/13 comment letter: Nature &amp; extent of contamination at Bldg 584 still needs to be determined.</a></p>	None identified in ROD	None identified in ROD	<p><b>1998 ROD</b> No Further Action <u>for soils</u>, but if the building <u>584</u> is ever removed further investigation and remedial action may be required</p>	<p><b>ROD, page 14:</b> If building <u>584</u> is ever removed, further investigations and RA may be required. <b>2000 Eastern Plume ESD:</b> If building <u>584</u> is demolished, Navy will assess need for additional soil sampling.</p> <p><b>Clarified LUC Objectives per Draft ESD</b> Prevent uncontrolled exposure to subsurface soil beneath Building 584</p> <p><u>Need enough of a sufficient protective buffer around Building 584 until the nature and extent of contamination is determined.</u></p>	<p><b>Based on ROD Risks and ESD Objectives</b> Removal or alteration of Building 584 floor unless prior written approval is obtained</p> <p><b>MEDEP Proposed Restriction</b> Removal of building until investigations are complete and determine final requirements <u>Need enough of a sufficient protective buffer around Building 584 until the nature and extent of contamination is determined.</u></p>	<p><b>Real Property/Legal</b></p> <ul style="list-style-type: none"> <li>Deed Restrictive Covenants</li> <li>State of Maine Declaration of Environmental Covenant (UECA)</li> </ul> <p><b>Governmental/Administrative</b></p> <ul style="list-style-type: none"> <li>Navy registration of the land use restriction with DigSafe.</li> <li>Submit a land use restriction boundary map and accompanying legal description to Town of Brunswick Planning Board for inclusion into their Planning Department Codes Enforcement MUNIS® database.</li> <li>Submit an overlay of land use restriction area to Town of Brunswick Planning Board and request that overlay be incorporated into NAS Brunswick Zoning Ordinance</li> </ul> <p><b>Other</b></p> <ul style="list-style-type: none"> <li>LUC/IC notification and reinforcement letters to current/future property owners encumbered by the land use restriction</li> <li>Annual inspections</li> </ul>
<p><b>Site 7*</b> (Old Acid/Caustic Pit)</p>	<p><b>Groundwater - Metals</b></p> <p><b>Surface Soils - Metals</b></p> <p><b>Subsurface Soils - Metals</b></p> <p>(Data Gap)</p>	<p>Groundwater remedy per ROD based on MCL/MEG exceedances not unacceptable risks</p> <p>Soil risks per ROD were within EPA target risk range but greater than MEDEP</p>	<p><b>2002 ROD</b></p> <ul style="list-style-type: none"> <li>Groundwater Monitoring</li> <li>Natural Attenuation</li> <li>Five-Year Reviews</li> <li>Implement Institutional Controls</li> </ul>	<p><b>ROD, page 1:</b> Remedy objective - to prevent human contact with and use of soil and groundwater <b>2008 Operating Instructions:</b> Restriction on soil excavation/disturbance and groundwater use</p> <p><b>Clarified LUC Objectives per Draft ESD</b></p> <ul style="list-style-type: none"> <li>Prevent uncontrolled exposure and/or</li> </ul>	<p><b>Based on ROD Risks and ESD Objectives</b> <u>Soil</u></p> <ul style="list-style-type: none"> <li>Prohibit residential use of the site unless prior written approval is obtained from the Navy, EPA, and MEDEP</li> <li>Prohibit soil excavation/disturbance or any construction activities unless prior written approval is obtained from the Navy, EPA, and MEDEP</li> </ul> <p><u>Groundwater</u></p>	<p><b>Real Property/Legal</b></p> <ul style="list-style-type: none"> <li>Deed Restrictive Covenants</li> <li>State of Maine Declaration of Environmental Covenant (UECA)</li> </ul> <p><b>Governmental/Administrative</b></p> <ul style="list-style-type: none"> <li>Navy registration of groundwater and land use restrictions with DigSafe</li> <li>Submit a groundwater and land use restriction</li> </ul>

SITE	MEDIA AND ASSOCIATED CONTAMINANTS OF CONCERN	UNACCEPTABLE RISKS REQUIRING REMEDIAL ACTION	SUMMARY OF CERCLA RECORD OF DECISION (ROD) REMEDY	INSTITUTIONAL CONTROL REQUIREMENTS/LUC OBJECTIVES	PROPOSED PROHIBITIONS	<u>POSSIBLE LUC IMPLEMENTATION ACTIONS</u> (for discussion only)
	Investigation)	target risk value (same risk results in 2010 Supplemental Investigation Report)		use of groundwater <ul style="list-style-type: none"> <li>• Manage construction activities</li> <li>• Prevent uncontrolled exposure to and/or use of surface and subsurface soils</li> <li>• Protect active and future remediation and monitoring systems</li> </ul>	<ul style="list-style-type: none"> <li>• Prohibit all uses of groundwater underlying the site unless prior written approval is obtained from the Navy, EPA, and MEDEP</li> <li>• Protect the integrity of all current and future remedial systems</li> </ul> <p><b>Additional MEDEP Proposed Restrictions</b></p> <ul style="list-style-type: none"> <li>• All other land use without approval</li> <li>• Agricultural uses</li> </ul>	boundary map and accompanying legal description to Town of Brunswick Planning Board for inclusion into their Planning Department Codes Enforcement MUNIS® database <ul style="list-style-type: none"> <li>• Submit an overlay of groundwater and land use restriction areas to Town of Brunswick Planning Board and request that overlay be incorporated into NAS Brunswick Zoning Ordinance</li> </ul> <p><b>Other</b></p> <ul style="list-style-type: none"> <li>• LUC/IC notification and reinforcement letters to current/future property owners encumbered by groundwater and land use restrictions</li> <li>• Annual inspections</li> </ul>
<b>Eastern Plume</b>  (Groundwater Plume from <a href="#">Site 11 Fire Training Area</a> , Site 4, & Site 13)	<b>Groundwater -</b> VOCs, 1,4-Dioxane  <b>Emerging Contaminant –</b> PFCs	Human health risks associated with ingestion of groundwater	<b>1998 ROD and 2000 ESD</b> <ul style="list-style-type: none"> <li>• Extraction and treatment of contaminated groundwater</li> <li>• Environmental Monitoring</li> <li>• Five-Year Reviews</li> <li>• Institutional Controls</li> </ul>	<p><b>ICs (page 4 of ROD)[Please check – not on page 4 of my copy of the ROD.]</b></p> <ul style="list-style-type: none"> <li>• Prevent use of and contact with impacted groundwater without written approval</li> <li>• Prevent activities that would negatively impact GWETS/remedy</li> <li>• Development of Operating Instructions</li> </ul> <p><b>Clarified LUC Objectives per Draft ESD</b></p> <ul style="list-style-type: none"> <li>• Prevent uncontrolled exposure and/or use of contaminated groundwater within GMZ</li> <li>• Prevent unacceptable exposure to volatile vapors potentially migrating to indoor air of future habitable structures within GMZ</li> <li>• Prevent changes in hydrology within GMZ that have potential to negatively impact nature and extent of groundwater contamination <u>and the remedy.</u></li> <li>• Manage construction activities in SMZ (northern SMZ on ESD Figure1) and GMZ</li> <li>• Protect integrity and operation of all remediation and monitoring systems</li> </ul>	<p><b>Based on ROD Risks and ESD Objectives</b></p> <ul style="list-style-type: none"> <li>• All uses of groundwater underlying GMZ without prior written approval</li> <li>• Protect integrity of all current and future remedial systems</li> <li>• Construction of habitable structures without evaluation and potential mitigation of vapor intrusion without prior written approval</li> </ul> <p><b>Additional MEDEP Proposed Restrictions</b></p> <ul style="list-style-type: none"> <li>• All uses of the site without approval</li> <li>• Disturbance of soil without approval</li> <li>• Disturbance of Merriconeag Stream, Mere Brook, and associated wetlands and tributaries <u>[ Note: There needs to be a buffer sufficient to protect these areas</u></li> <li>• Disturbance of seeps</li> <li>• Disturbance of sediment</li> </ul>	<p><b>Real Property/Legal</b></p> <ul style="list-style-type: none"> <li>• Deed Restrictive Covenants</li> <li>• State of Maine Declaration of Environmental Covenant (UECA)</li> </ul> <p><b>Governmental/Administrative</b></p> <ul style="list-style-type: none"> <li>• Negotiate with property owners impacted by off-base groundwater contamination to reach agreement not to use groundwater</li> <li>• Navy registration of GMZ/SMZ and underground lines with DigSafe</li> <li>• Submit GMZ/SMZ boundary maps and accompanying legal descriptions to Town of Brunswick Planning Board for inclusion into their Planning Department Codes Enforcement MUNIS® database</li> <li>• Submit an overlay of GMZ/SMZ to Town of Brunswick Planning Board and request that overlay be incorporated into NAS Brunswick Zoning Ordinance</li> </ul> <p><b>Other</b></p> <ul style="list-style-type: none"> <li>• LUC/IC notification and reinforcement letters to current/future property owners encumbered by GMZ/SMZ.</li> <li>• Annual inspections</li> </ul>

\* Potential Radiological Site. It will be noted in the LUCIP/LUC RDs that radiological evaluation is ongoing at these sites and that transfer of these properties cannot occur until appropriate restrictions are determined.

“Prior written approval” means prior written approval from the Navy, EPA, and MEDEP.

**Sent:** Wednesday, August 26, 2015 2:47 PM  
**Cc:** Anna Breinich  
**Subject:** Re: Comments for ZORC meeting

We echo Phil's concern about about these omissions. That said, we know that this is an arduous process and thank all for their hard work.

**From:** Anna Breinich  
**Sent:** Wednesday, August 26, 2015 4:14 PM  
**Subject:** RE: Comments for ZORC meeting

Hi,

In an earlier email exchange with Carol, I told her I would review the draft to make sure all of 204.3 additional requirements were included/addressed in the ordinance. I'm attaching a comparison table that was reviewed at our ZORC meeting today. One additional change will be made to reinsert a height sliding scale restriction based on distance from property lines. The meeting was recorded and will be available for on-demand viewing within a day or so.

Hope that helps.  
Anna

On Aug 26, 2015, at 1:23 PM, wrote:

Hi Anna,

Several of my neighbors and I have been following the ZORC process through our friend and neighbor Carol Liscovitz. Carol wrote last night to say that she couldn't be at today's meeting, but unfortunately, as far as I know, none of the rest of us is able to attend.

We are particularly interested in confirming that certain standards relating to the current CU2 district are being carried forward into the latest draft. These provisions appear as paragraphs A, B and C in Section 204 (see, below).

The last draft we saw did not include them, but Carol told us she had spoken with you and that their elimination had been unintentional. When you have a chance, we'd very much like to learn whether or not they've been restored to the latest draft.

Thanks for all your hard work on this.

### **204.3 Additional Requirements**

**A) Minimum Setback Requirements in the CU2 District.** There are additional setback requirements in the CU2 Zone based upon distances from specific zoning district boundaries as depicted on the map on this page. No new structure (including parking facility) may be constructed within 125 feet from Boundaries A and B, 80 feet from Boundary C, and 50 feet from Boundary D. See *Illustration 204.2A* below.

**B) Tree Cutting in the CU2 District.** Tree cutting, with the exception of clearing of dead trees and removal of overgrowth, is prohibited within 125 feet of Boundaries A and B depicted on the map on this page.

**C) Additional Development Review Requirements in the CU2 and CU5 Districts.** Applications for Development Review in the CU2 and CU5 districts shall not result in the construction of new roadways or driveways for motor vehicles which connect to Meadowbrook Road, Whittier Street, Breckan Rd, Atwood Lane, Bowdoin Street or Berry Street. No new construction within the CU5 or CU2 Districts shall be accessed through any of these streets.

*Illustration 204.2A*



**Sent:** Wednesday, September 23, 2015 2:35 PM

**To:** Anna Breinich

**Subject:** Proposed Ordinance Modifications regarding St. John's Church and School

Hi Anna

I appreciated the opportunity to meet with you and the Ordinance Rewrite Committee earlier today to express my concern about the detrimental impact the proposed changes in Draft 2 have on the long range plans of the school and church.

You will recall that about 5 years, Sitelines was retained by the Church to assist in developing a long range plan to improve the campus and to build a new school. The first phase of the program was to demolish the rectory which had not been used for housing for seven years. After several meetings with town staff and committees, the building was razed and handicap parking was provided adjacent to the church.

Although the parcel was divided by a zone line between MU-2 and TR-1, the key dimensional requirements of footprint and lot coverage supported the future program of buildings. The proposed GR-6 reduces the footprint to 7,500 sf. and the lot coverage to 50%, both of which would preclude future building plans.

While I defer to you and the committee to determine a solution, I offer you my thoughts. The church parcel could be included within the adjacent zone designated as GM-6. Many other churches are in this zone and the dimensional requirements would address the program requirements. Should this not be acceptable, perhaps a paragraph similar to that on page 4-11 paragraph 4.1.4.B.10 Daycare would be acceptable. The paragraph might read "Church and School facilities would have the same dimensional requirements as found in the GM-6 District."

I appreciate the hard work of the Committee and look forward to their favorable modifications. Please keep me informed of the agenda when this may be discussed so that I can be advised of your consideration. I am available at your convenience to discuss this important issue.

Thanks for your consideration

**Sent:** Wednesday, September 23, 2015 2:35 PM

**To:** Anna Breinich

**Subject:** Proposed Ordinance Modifications regarding St. John's Church and School

Hi Anna

I appreciated the opportunity to meet with you and the Ordinance Rewrite Committee earlier today to express my concern about the detrimental impact the proposed changes in Draft 2 have on the long range plans of the school and church.

You will recall that about 5 years, Sitelines was retained by the Church to assist in developing a long range plan to improve the campus and to build a new school. The first phase of the program was to demolish the rectory which had not been used for housing for seven years. After several meetings with town staff and committees, the building was razed and handicap parking was provided adjacent to the church.

Although the parcel was divided by a zone line between MU-2 and TR-1, the key dimensional requirements of footprint and lot coverage supported the future program of buildings. The proposed GR-6 reduces the footprint to 7,500 sf. and the lot coverage to 50%, both of which would preclude future building plans.

While I defer to you and the committee to determine a solution, I offer you my thoughts. The church parcel could be included within the adjacent zone designated as GM-6. Many other churches are in this zone and the dimensional requirements would address the program requirements. Should this not be acceptable, perhaps a paragraph similar to that on page 4-11 paragraph 4.1.4.B.10 Daycare would be acceptable. The paragraph might read "Church and School facilities would have the same dimensional requirements as found in the GM-6 District."

I appreciate the hard work of the Committee and look forward to their favorable modifications. Please keep me informed of the agenda when this may be discussed so that I can be advised of your consideration. I am available at your convenience to discuss this important issue.

Thanks for your consideration

for ZORC file

fly

October 12, 2015

Brunswick Town Council  
Town of Brunswick  
85 Union Street  
Brunswick, Maine 04011

Dear Council Members,

I'm writing to request your approval to change the current zoning of 90 Union Street from TR-5 to MU-2 in order to allow #90 Union Street to be used as a retail business.

I purchased this building in 1985 from Emily Longtin. It was Longtin's Variety Store for a very long time. The subject property consists of two buildings, each containing two rental units. These buildings are located at 90 and 92 Union Street, on the northwest corner of Union and Weymouth Streets and are identified on Brunswick Tax Map U-16 as lot 83, and are further described in Cumberland County Registry of Deeds Book 6938, Page 42.

Over the thirty years that I've owned this property, 90 Union Street has served as an interior decorator's retail showroom, a yarn shop, a business machine retail business, and most recently, for the past 12 years, a counseling and education facility.

I've been informed by Jeff Hutchinson, Brunswick Code Office, that you are in the process of finalizing a draft ordinance that will change 90 Union Street to mixed use, commercial/residential. I would appreciate your approval of this change as soon as possible. The first floor at 90 Union has been vacant since the end of June. I do, however, have a potential business tenant who is very interested in the space for use as a small hobby shop.

It's timely for the Council to make the necessary changes to the very dated zoning ordinance in Brunswick to allow a business in a location that should be considered part and parcel of the commercial/retail center in Brunswick.

Thank you for your consideration.

Sincerely,

Roger LaJeunesse  
Owner, 90/92 Union Street  
Brunswick, Maine 04011

Home address:  
1020 Memorial Drive  
Winthrop, Maine 04364  
Cell: 207-632-5387

**Sent:** Wednesday, December 02, 2015 9:49 AM  
**To:** Anna Breinich  
**Subject:** Zoning Questions

Dear Anna,

1. In reading over the information online regarding the zoning ordinance, I found this email. I have highlighted the area of question and I would appreciate it if you could clarify what this means.

From: Anna Breinich Sent: Wednesday, August 26, 2015 4:14 PM Subject: RE: Comments for ZORC meeting

Hi, In an earlier email exchange with Carol, I told her I would review the draft to make sure all of 204.3 additional requirements were included/addressed in the ordinance. I'm attaching a comparison table that was reviewed at our ZORC meeting today. One additional change will be made to **reinsert a height sliding scale restriction based on distance from property lines.** **Will be part of Neighborhood Protection Standards, under further revision for later in December.** The meeting was recorded and will be available for on-demand viewing within a day or so. Hope that helps. Anna

2. In addition, in reviewing the 2nd draft of the ordinance, there was a footnote regarding separate character controls for those lots fronting inner Pleasant Street. I have highlighted the note. Would you be able to explain what that means?

Growth Residential 6 (GR6) District133

The Growth Residential 6 (GR6) District applies to the primarily residential portion of the Town Core Planning Area, encompassing the well-established Northwest Brunswick neighborhood. The District is intended to provide for compatible infill development and redevelopment, as well as expansions to existing buildings, while maintaining the overall character of the neighborhood. The District continues to provide a mix of single-family, two-family and multi-family residential uses, walkable to essential services, at a maximum density of 10 dwelling units per acre. Limited nonresidential uses are allowed by conditional use, while protecting and enhancing development patterns of the established neighborhood.

The District is also covered by the Village Review Overlay Zone (VRO). 132 Descriptions of GR2, GR3, GR4, and GR5 derived from the Comprehensive Plan's description of its Town Extended Residential designation, with neighborhoods identified per current Sec. 203. 133 Derived from the Comprehensive Plan's description of its Town Core designation, with neighborhoods identified per current Sec. 202. **Statement was revised to incorporate separate character controls for those lots fronting Pleasant Street. No need for revision as written and Pleasant Street is currently drafted same as the rest of the neighborhood.**

I appreciate you assistance.

Brunswick Area Citizens for a Safe Environment  
Po Box 245  
Brunswick ME 04011  
bacsemail@gmail.com

December 14, 2015

Anna Breinich  
Director of Planning  
Town of Brunswick

RE: Former Naval Air Station Brunswick

Dear Director Breinich;

As members of the Brunswick Area Citizens for a Safe Environment we wish to thank you for your time and commitment attending our recent day-long joint session with the Navy and regulators to explore effective land use controls for the former Naval Air Station Brunswick. As stakeholders, representing the interests of the public, we have consistently advocated for land use controls that are accessible and easily understood by all citizens, whether working or recreating on the former Base property. A clear set of land use guidelines is best for all, including property owners located on the base as well as surrounding neighbors.

As you know, we have long advocated for a base-wide groundwater restriction as the easiest and most protective form of institutional control that would be accessible to those seeking information about the appropriate use of the former base property. After listening to the concerns expressed by Bowdoin College for this base-wide restriction, BACSE has had further meetings in an attempt to resolve competing concerns. To that end, we can agree that a base-wide model of groundwater restrictions which covers all parts of the Base, could exclude the Bowdoin College parcel. Unlike other users/owners of other parcels at the Base, the College has both the financial resources, institutional memory and access to experts that could effectively permit their assumption of the responsibility for avoiding impact to contaminated groundwater. Furthermore Bowdoin has been a thoughtful participant as a fellow RAB stakeholder since the inception of the BRAC process and we are comfortable with their understanding of the risks to themselves and surrounding property owners for responsibility for causing impacts of contaminated groundwater when and if they seek regulatory approval for groundwater use on their property.

To that end we will be requesting the Navy to again return to a "base-wide" model that simply removes the Bowdoin parcel from the definition of "base-wide." While any future access by Bowdoin would still require regulatory approval, it would not be subject to local ordinance. A modified base-wide definition would however permit the global thinking necessary by other lot owners and users as it relates to

Anna Breinich  
December 14, 2015  
Page 2

groundwater access and use. As one community, any extraction or addition of water could impact the fate and transport of groundwater contamination.

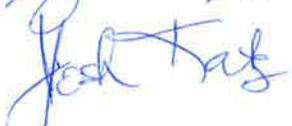
Groundwater contamination is not an issue that will be resolved in our lifetime and the more easily identifiable information on land use restrictions is, the greater the likelihood we will avoid future incidents that contravene those restrictions. Therefore, we believe that our simple proposal is a straightforward way to protect individuals and the environment.

We would welcome the opportunity to sit down with yourself and other members of the zoning committee to discuss the issue further and to collaborate on a proposal that protects the citizens of Brunswick and a base-wide consideration of groundwater. Please feel free to contact any of us by our group email address at your earliest convenience.

Very truly yours,

Members of the Restoration Advisory Board,  
And Brunswick Area Citizens for a Safe Environment

 (David S. Page)  
David W. Chipman David W. Chipman

 Juris Apse.  
 Suzanne L. Johnson  
 Josh Katz  
 Arbinette Mercedes  
Carol White

# Bowdoin

December 21, 2015

Zoning Ordinance Rewrite Committee  
Department of Planning & Development  
85 Union Street  
Brunswick, ME 04011

**Re:** Additional Comments to Section 3.4 and Section 4.10 of the Brunswick Zoning Ordinance, Second Draft dated July 2015

Dear Committee Members:

We offer following comments:

**1. Section 3.4 Supplementary Use Standards, Pages 3-7 and 3-10**

As discussed in work session, we ask the ZORC to consider amending the following sections as follows:

**3.4.1.C (1)** In the GR9 district, residence halls are ~~limited to properties permitted only on properties~~ currently ~~or formerly~~ owned and operated as college ~~fraternity houses, residence halls or offices~~.

**3.4.1.K.** In the GR9 district, office uses are permitted only on properties currently ~~or formerly~~ owned and operated as college ~~fraternity houses~~ ~~offices~~ or residence halls.

**2. Section 4.10 Neighborhood Protection Standards (NPS), Pages 4-43 through 4-44**

**A. Application of a Sliding Scale Standard for Height**

The ZORC has discussed incorporating a sliding scale for setback and height into the NPS but has not produced or reviewed any draft language to date. As the College has noted at previous work sessions, this sliding scale method is used in the current ordinance on one very small edge of the College property around the Harpswell Place neighborhood. We are anxious to review actual draft language to understand how this concept might be applied in the context of a neighborhood protection standard.

In the interim, we offer the following comments.

- The existing standard allows the College to build to a height of 45 feet within the current setbacks of 15 feet of what is now CU3. Currently the requirements of Section 204.3 G. of the Zoning Ordinance would also allow the College to increase height by 5 feet for every additional 10 feet of setback, up to a maximum height of 55 feet. So today in CU3 the College can build a structure to a height of 55 feet by setting the development back 35 feet from a boundary.
- In the proposed draft, NPS restrict the height of a structure within 30 feet of a residential lot with a dwelling to 35 feet. Beyond 35 feet, the height limit is now 70 feet. We are sensitive to the concerns of neighbors along the edge of Harpswell Place and agree some continuing sliding scale along the residential boundaries in this area could be appropriate, given the added height standard

**TREASURER'S OFFICE**

Bowdoin College 5600 College Station, Brunswick, ME 04011-8447 207.725.3242 Fax 207.721.5161

# Bowdoin

proposed for this edge (70 feet). To accomplish this, we suggest adding the following note to Table 4.1.2: Dimensional and Density Standards for Growth Area Zoning Districts in the row for Building Height, column for GC1:

*[21] Except that and notwithstanding applicable standards of section 4.10.2.A., structures within 35 feet of a boundary of a residential lot with an existing 1- or 2- family dwelling within the GR7 district are limited to a height of 55 feet. Building height may be increased 5 feet for every additional 10 feet of setback up to the maximum height of 70 feet.*

- This proposal accomplishes three things: (1) neighbors see a reduction by 10 feet (roughly one story) in the permitted height of a structure within 30 feet of a boundary, (2) the existing restriction on height to 55 feet within 35 of the boundary remains in place, and (3) the College gains some flexibility in developing in the core of the campus by increasing the height standard to 70 feet. However, any structure built at the maximum height would be set back a minimum of 60 feet from the residential lots in Harpswell Place.

In conclusion, we think some additional protection along the boundary of Harpswell Place is reasonable but we also think that broadly applying an additional sliding scale standard for height to other areas where the neighborhood protection standards would apply is unnecessary and potentially overly restrictive. Many edges of the campus are either already buffered by generous setbacks or are developed at the scale of institutional buildings. For these edges, we believe the application of the proposed NPS in Section 4.10.2.A. that limits height of structures to 35 feet within 30 feet of a residential lot with a dwelling is a reasonable approach.

## **B. Section 4.10.1 Applicability and 4.10.2 Standards**

The Neighborhood Protection Standards (NPS) apply in Growth Mixed Use (GMU) and Growth Special Purpose (GSP) districts to development *that abuts or is across the street from* a Growth Residential (GR) district lot that contains an existing 1- or 2- family dwelling.

The draft Standards set forth in 4.10.2 A., B., C., and E. all refer to shared lot lines and/or distances from shared lot lines. For those cases where the mixed use or special purpose district is separated from a residential district by a street with three or fewer lanes, there are no shared lot lines making it unclear from which lot line distance will be measured. We believe the intent is that measurements be made from the boundary of the residential lot being buffered and respectfully request that the ZORC add language to the ordinance that clarifies this point. If the intent is to measure from the boundary of the districts, we respectfully request that where streets separate district boundaries, those district boundaries be drawn along the center line of the street. Currently and on the draft zoning map, streets separating GC and GR districts are included in the residential districts. In the case of Upper Park Row, two streets separated by an esplanade all are included in the residential district abutting the GC district, creating an already significant buffer to the dwellings along the GR boundary.

For illustration, please see the attached map showing areas where GC and GM are separated from residential districts by streets.

### TREASURER'S OFFICE

# Bowdoin

## **C. Section 4.10.2. C Compatibility Standards**

As indicated in our initial comments on this section (October 2014), we believe that this standard should allow more flexibility in accomplishing the intent of establishing visual buffers to non-residential development. Development subject to development review already must comply with the buffering standards for landscaping in Section 4.5.2.C. The additional requirement for installation of a solid fence as a visual buffer may afford additional neighborhood protections in some cases, but in others, fencing may be inappropriate or undesired. We believe the additional buffering should be considered on a case by case basis through the process of development review.

If the standard is to remain, the language of the second draft regarding fencing along shared lot lines is improved from the first draft but remains problematic for large lots and for districts that are separated by streets. We ask the ZORC to consider exempting large lots from this standard or having the standard apply only when the development footprint is within some reasonable distance from the shared lot line or setback, **and** when no other natural buffer exists. This standard should not apply to development in a GMU or a GSP district that is across the street from a GR district.

For example, in the case of the College's solar PV installation at the former naval base, this standard would have required the College to place a 200 foot fence along some portion of a district boundary to buffer a development that is not visible from any residential lot due to the considerable distance from the neighboring residential lots, topography, and existing undeveloped wooded buffer. As drafted, the College could be required to cut trees to put up a fence that would effectively serve no purpose.

We do not believe this is the intent of the buffer requirement and ask the ZORC to eliminate this section.

We hope the ZORC will discuss these issues in the very near future so that there is adequate time to fully review the proposed language prior to the draft ordinance being shared with the Planning Board and Town Council.

Thank you,



Catherine Ferdinand  
Project Assistant

Cc: S. Catherine Longley  
Don Elliot

### TREASURER'S OFFICE

Bowdoin College 5600 College Station, Brunswick, ME 04011-8447 207.725.3242 Fax 207.721.5161

**From:** Jared Woolston  
**Sent:** Wednesday, January 20, 2016 3:57 PM  
**To:** Anna Breinich  
**Subject:** ZORC

Anna: Jim lives off Bridge Road and has concerns about the pending five (5) acre lot requirement in the draft ordinance. Jim indicated that he has lived in Brunswick for a long time, and talked to Jeff Hutchinson about the lot requirement. I indicated to Jim that my understanding was the draft requirement is intended to discourage dense development in sparsely developed areas of Brunswick, and encourage dense development in existing developed areas. Jim indicated that he agreed with the intention of the lot-size requirement but remains concerned with 5-acres as the minimum lot size. I advised Jim to contact you regarding the ZORC process (public meetings, comments, concerns); and Cathy Jameson to address his concern, specifically, the difference between two-acre lots versus five-acre lots in terms of land valuation, taxes, and the difference in return on his investment of land (which may be divided and sold at a later date).

Jared Woolston  
Planner  
Town of Brunswick  
85 Union Street  
Brunswick, ME 04011

(207) 725-6660, ext. 4022 (v)  
(207) 725-6663 (f)  
[jwoolston@brunswickme.org](mailto:jwoolston@brunswickme.org)  
[www.brunswickme.org](http://www.brunswickme.org)

**From:** Anna Breinich  
**Sent:** Wednesday, March 30, 2016 4:11 PM  
**Cc:** Jeff Hutchinson  
**Subject:** RE: Davis Court expansion

Thanks.

I will pass your request to revise the proposed zoning map to the Zoning Ordinance Rewrite Committee. Please keep in mind that the Committee is still working on the draft ordinance which will then be passed on to the Planning Board for their review and the holding of additional public sessions and a public hearing. After that, the Planning Board will provide a recommended zoning ordinance to Town Council for their review and public comment before adoption, hopefully by the end of the year.

Anna

Anna Breinich, FAICP  
Director of Planning and Development  
Town of Brunswick  
85 Union Street  
Brunswick, ME 04011

(207) 725-6660, ext. 4020 (v)  
(207) 725-6663 (f)  
(207) 504-0549 (c)  
[abreinich@brunswickme.org](mailto:abreinich@brunswickme.org)  
[www.brunswickme.org](http://www.brunswickme.org)

**Sent:** Monday, March 28, 2016 5:30 PM  
**To:** Anna Breinich  
**Subject:** Davis Court expansion

Dear Ms Breinech

After discussing the possibility of expanding our mobile home park with the Brunswick code enforcement office, it was suggested that I submit a request to develop 3 lots on a vacant piece of land which is only accessed from within our existing park. The lot has a different address, (Hawthorn Street) and is taxed separately. The utilities (Water and Sewer) are already stubbed out at the site. For all intents and purposes, the lot is currently a part of the park. A visual study of the park would have most observers thinking just that. We have the required square footage to support the three new lots. We have a current waiting list of renters for these sight when they become available. This would also benefit the town with additional tax revenue. We hope the committee will agree with this plan, and allow us to begin asap  
We thank you for your time and consideration and stand ready to afford any furthe information and help that you may request.

**From:** Anna Breinich

**Sent:** Wednesday, May 04, 2016 11:17 AM

**To:** Charlie Frizzle; 'Margaret Wilson'; Richard Visser; Jared Woolston; Jeff Hutchinson; Don Elliott; Julie Erdman

**Subject:** FW: Today's zoning meeting

I will raise this concern today based on yesterday's discussions with the resident.

Anna

Anna Breinich, FAICP  
Director of Planning and Development  
Town of Brunswick  
85 Union Street  
Brunswick, ME 04011

(207) 725-6660, ext. 4020 (v)

(207) 725-6663 (f)

(207) 504-0549 (c)

[abreinich@brunswickme.org](mailto:abreinich@brunswickme.org)

[www.brunswickme.org](http://www.brunswickme.org)

**Sent:** Wednesday, May 04, 2016 11:05 AM

**To:** Anna Breinich

**Subject:** Today's zoning meeting

Hi Anna,

Thanks again for meeting with us yesterday. Neither Kevin nor I will be able to make it to the zoning meeting today at 1 o'clock. Per our conversation about Bowdoin's development of their property that abuts ours, we appreciate you highlighting our concerns to the zoning committee. As plans for the Roux Center for the Environment evolve, it is important to us that we are given the same neighborhood protections enjoyed by other areas abutting the college, such as Longfellow. It appears there is a discrepancy right now in height restrictions placed on that College St./Harpwell Rd. lot, as compared to other areas where college property meets a residential zones.

We greatly appreciate your time and attention to this matter.