



**STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION**

February 23, 2015

Mr. Richard Cathcart
Delaware City
P.O. Box 4159
Delaware City, DE 19706

RE: PLUS review 2015-01-03, Delaware City Comprehensive Plan Amendment

Dear Richard,

Thank you for meeting with State agency planners on January 28, 2015 to discuss the proposed comprehensive Plan Amendment for Delaware City. This amendment includes the expansion of the current, future annexation area to include the entirety of the Fort DuPont complex area and the revisions to the City's zoning regulations specific to the Ft. DuPont area once annexed into the City. as related to the redevelopment and preservation efforts as outlined in the recently completed master plan for the area.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting.

Recommendations: Our office strongly recommends that the Town consider these recommendations from the various State agencies as you review your plan for final approval.

This office has received the following comments from State agencies:

Office of State Planning Coordination – Contact Herb Inden 739-3090

- As a participant in the master planning effort and the having membership on the Ft. DuPont Redevelopment and Preservation Corporation we support this effort with the understanding that development will be well coordinated with key state agencies and the City. This is particularly important given the nature of the land with significant environmental challenges as noted by other agencies in this letter and the historical significance of this area.

Department of Natural Resources and Environmental Control – Contact Kevin Coyle 739-9071

- DNREC has no objections to the comprehensive plan amendment and omnibus ordinance. The following comments are offered as if the annexation areas were to be developed. DNREC would welcome the opportunity to meet with the Town and/or the Ft.

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DuPont Redevelopment and Preservation Corporation in a collaborative manner to discuss these recommendations and possible future implementation.

Flood Management

- A large percentage of Ft. DuPont is located in a high risk floodplain (1% annual chance floodplain). The City participates in FEMA's National Flood Insurance Program (NFIP) and has recently adopted a new floodplain ordinance. Any development that occurs on this parcel will have to fully comply with the City's regulations. FEMA will be issuing revised Flood Insurance Rate Maps (FIRMs) for New Castle County on February 4, 2015. FEMA's FIRMs are based on past events and don't take future conditions into account, as they are used for insurance purposes. The 2013 Master Plan doesn't clearly show detailed topography of the site, nor flood elevations where the proposed redevelopment will occur.
- It is our understanding that the City has taken over the responsibility of code enforcement and inspection from New Castle County. We are concerned about the City's capacity to regulate an area that may see such significant development, given the City's current resources. Strict enforcement of the City's floodplain ordinance and maintaining the necessary documentation is required to remain in good standing as an NFIP participating community and as a community participating in the Community Rating System. There are also a large number of historic buildings on this parcel. The Town's floodplain ordinance requires that a structure that is substantially improved, meaning greater than 50% of the market value of just the structure, must come into compliance with current floodplain regulations. This could entail lifting an entire structure to bring its lowest floor into compliance. Historic structures are not automatically excluded from this provision. The Master Plan doesn't indicate the flood risk of the structures proposed to be utilized. We recommend an analysis of the foundation adequacy, floor elevations, base flood elevations, substantial improvement needs, and road flooding, if such an analysis has not already been done.
- We are also cognizant of the Governor's passage of Executive Order 41 which mandates state funded projects incorporate Sea Level Rise and increased flood heights into the design and construction of future projects. All future planning, redevelopment, and use of this area needs to be reconsidered in light of Executive Order 41.

Sea Level Rise

- Portions of the areas proposed for annexation including Fort DuPont, its surroundings and portions inside the existing boundaries of Delaware City will be subject to direct and permanent inundation from sea level rise (<http://de.gov/slrmapp>).
- Sea levels in Delaware City area have risen by more than a foot over the past century (NOAA, 2014). This rate of sea level rise is likely to accelerate in the coming decades as a result of global climate change and local subsidence. Accelerated sea level rise will result in permanent flooding of low-lying coastal areas and increased risk of flood

damage during storms (DNREC, 2012). The state of Delaware is preparing for sea level rise to accelerate in the coming decades, resulting in a change in mean sea level of between 1.5 feet to 4.9 feet by 2100.

- Consistent with this projection, the mean sea level trend in this area has recently been adjusted upward from 3.46 mm/year to 3.61 mm/year based upon data from 1956 to 2013 (http://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?stnid=8551910).
- Delaware City's vulnerability to sea level rise and coastal flooding was well documented in the Delaware City Hazard Mitigation and Climate Adaptation Action Plan, published in 2014 (http://delawarecity.delaware.gov/files/2013/02/Delaware-City-Hazard-Climate-Action-Plan_no-appendices_January-20141.pdf). However, the proposed annexation area and potential development there was not considered in the development of this plan. The potential for sea level rise impacts at Fort DuPont specifically were documented in the Sea Level Rise Vulnerability Assessment for Delaware in 2012 (<http://de.gov/slrva>). Approximately 34% of Fort DuPont's land area could be inundated by 1.5 feet of sea level rise; 63% of its land mass could be inundated by 3.4 feet of sea level rise; and 83% of its land mass could be inundated by 4.9 feet of sea level rise (see Figure 1). This represents a significant flood risk to investors and potential business or homeowners.
- The desire of the City to expand and provide homes and amenities in this area is understandable; however, the City must also be aware that existing flooding issues on these parcels and their egress routes are likely to worsen in coming years. Although it may be possible to raise buildings out of the existing floodplain, raise the land surface or build structures to prevent water from intruding on site, rising sea levels, coupled with an anticipated decrease in depth to water table, may make it difficult for stormwater to exit the site. This further contributes to the flood risk on site.
- Executive action by Governor Markell has directed state agencies to avoid building structures and infrastructure in flood prone areas (including those areas subject to sea level rise); this may limit the potential for Delaware City to benefit from state investments in the area. The City should be prepared to make significant investments in flood abatement projects should development proceed and should consider establishing new dedicated funding mechanisms for such projects.

Recommendations:

- If the area is annexed, the City should consider an update to its Hazard Mitigation and Climate Adaptation Plan that includes actions necessary for flood abatement and sea level rise adaptation at this site.
- Site design and construction standards that are more stringent than the existing floodplain standards in Delaware City should be incorporated into the Historic Preservation and Redevelopment District development ordinance. Best practices would include avoiding

new structures within a mapped sea level rise area. Where such development cannot be avoided, new structures should be built with an additional 18 inches of freeboard, plus additional to accommodate future sea level rise, to protect the health, safety and general welfare of people occupying and using the structures.

If you would like any additional information please contact Delaware Coastal Programs at (302) 739-9283.

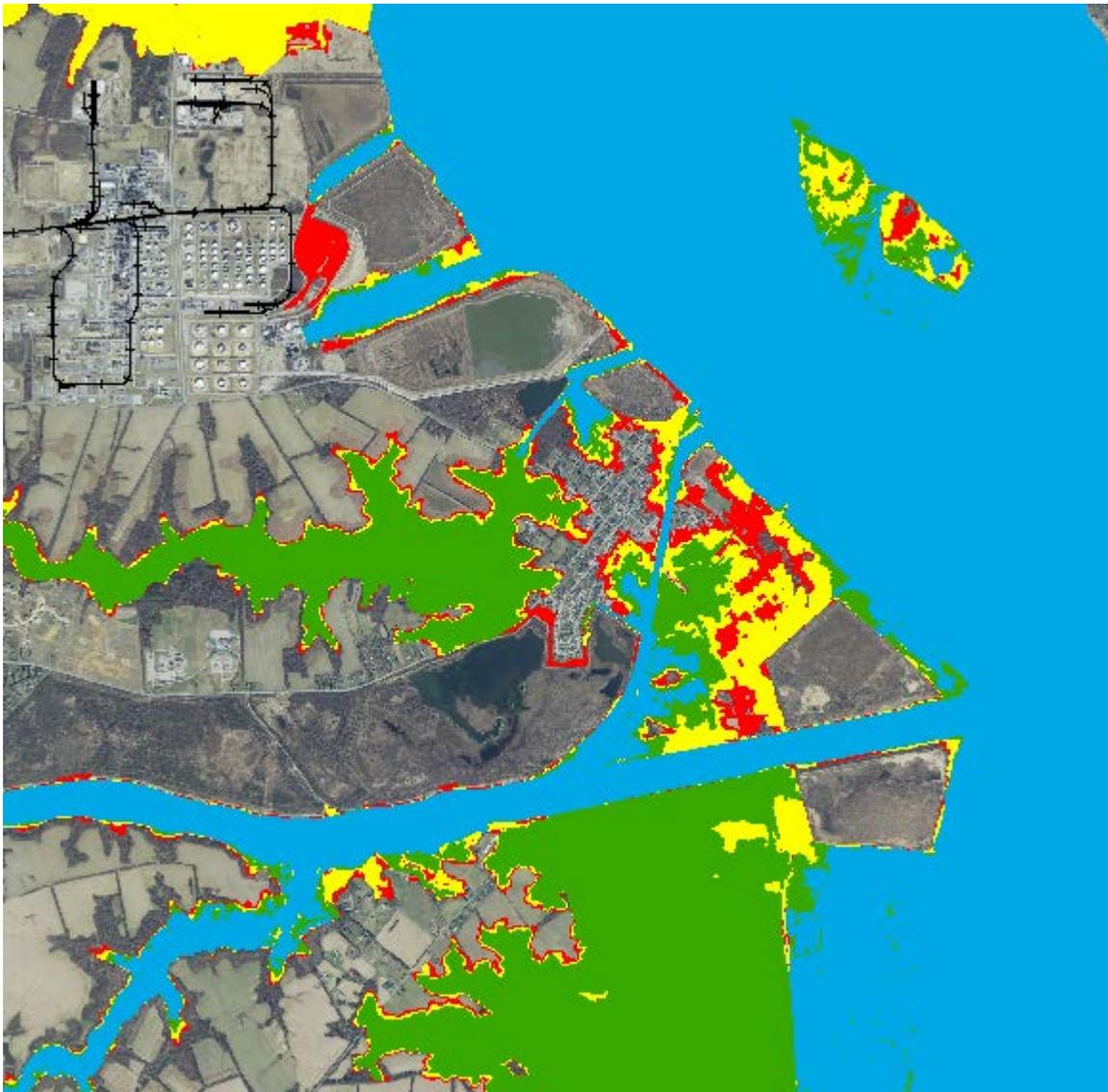


Figure 1. Sea Level Rise bathtub inundation map of Delaware City and vicinity. Green represents the level of mean higher high water with 0.5 meters of sea level rise; yellow represents 1.0 meter and red represents 1.5 meters.

Hazardous Waste Sites.

- If it is determined by the Department that there was a release of a hazardous substance on the property in question and the Department requires remediation pursuant to the Hazardous Substance Cleanup Act, the provisions of 7 Del.C., Chapter 91, Delaware Hazardous Substance Cleanup Act and the Delaware Regulations Governing Hazardous Substance Cleanup shall be followed.
- Should a release or imminent threat of a release of hazardous substances be discovered during the course of future development (e.g., contaminated water or soil), construction activities should be discontinued immediately and DNREC should be notified at the 24-hour emergency number (800-662-8802). SIRS should also be contacted as soon as possible at 302-395-2600 for further instructions.
- The Governor Bacon Health Center/Fort DuPont State Park (DE-1007) is generally located along the Delaware River south of Delaware City, New Castle County, Delaware and is bounded by the Delaware River to the east, the Chesapeake and Delaware (C&D) Canal and associated lands to the south, and a branch of the C&D canal to the west and north. The Governor Bacon Health Center/Fort DuPont State Park includes over 380 acres, numerous buildings, and features originating from military operations.
- After the former military reservation (Fort DuPont) was transferred to the State of Delaware in 1946, it was turned into the Governor Bacon Health Center. In 1992, portions were then turned into the Fort DuPont State Park. Several identified areas of environmental concern were identified on-site, including Landfill Area #1. The Landfill Area #1 Site is within Fort DuPont State Park and is generally located adjacent to the Delaware River and south of the eastern terminus of Wilmington Avenue.
- In 2014, the EPA removed and disposed of a portion of Landfill Area #1 that was in direct contact with the Delaware River. DNREC is aware that the upland portion of Landfill Area #1 was not removed during the EPA removal action.
- Although SIRS has no specific comments regarding the proposed comprehensive plan at this time, SIRS strongly recommends that the land owner(s) perform environmental due diligence of the property by performing a Phase I Environmental Site Assessment and Phase II Environmental Site Assessment (including a title search to identify environmental covenants) in accordance to Section 9105(c) (2) of the Delaware Hazardous Substance Cleanup Act (HSCA). While this is not a requirement under HSCA, it is good business practice and failure to do so will prevent a person from being able to qualify for a potential affirmative defense under Section 9105(c) (2) of HSCA. Please contact Kristen Thornton, the SIRS project officer for the Fort DuPont Site, for further information regarding the Site.
- Additional remediation may be required if the project property or site is re-zoned by the county or City.

State Historic Preservation Office – Contact Terrence Burns 736-7404

- As noted in the documentation for the proposed comprehensive plan amendment, the proposed annexation area includes Fort DuPont Historic District, which is listed in the National Register of Historic Places. The role of Delaware City's Historic Preservation Commission in the review of activities within the proposed Historic Preservation and Redevelopment zoning area needs to be considered. Adaptive reuse of historic buildings should be encouraged wherever economically feasible and appropriate for the permissible land uses in the new zoning district. If you have any questions or concerns, please contact Alice Guerrant at (302) 736-7412 or Jessie Zonavich at (302) 736-7433.

Once a decision has been reached on this proposed comprehensive plan amendment, please forward a copy of the plan amendment to the Office of State Planning Coordination for our records. The plan amendment must include a revised version of any maps that were updated as well as any text that was approved in amending the comprehensive plan.

Thank you for the opportunity to review this Comprehensive Plan amendment. If you have any questions, please contact me at 302-739-3090.

Sincerely,

A handwritten signature in cursive script that reads "Constance C. Holland".

Constance C. Holland, AICP
Director, Office of State Planning Coordination