

Capkov Ventures

Developing Homes And Communities Since 1954, In Chapel Hill Since 1972.



a Kovens Company

12/4/2020

Dear Mayor Hemminger and Town Council,

I wanted to provide a clearer picture of the RCD encroachment being requested for the Bridgepoint project in light of the Town Council's request for more information. I have found a number of scientific papers from Universities across the southeast, and government agencies at the Federal, State and Local levels. Probably the most comprehensive is a study done by the EPA in October of 2005 entitled "Riparian Buffer Width, Vegetative Cover, and Nitrogen Removal Effectiveness" written by Paul M. Mayer Et. Al. It reviews some 40 different studies on the effectiveness of riparian buffers at various widths but with startling different results from each study. Besides the variation in the studies most were looking primarily at nitrogen concentrations in agricultural settings (the USDA study) as opposed to residential or commercial development settings. The difference is that in agricultural settings they are factoring in annual cultivation, or disturbance of the soil, and the adding of chemical fertilizers. In the case of commercial and residential development the land surrounding the RCD is stabilized permanently. Looking at the Bridgepoint site specifically, we are not adding any impervious surface in the RCD as many projects have done. Any disturbance in the RCD proposed by the Bridgepoint project will be immediately restored with native plants or grasses which restore the benefits of the RCD almost immediately. This is a significant difference.

After reviewing the EPA study and others referenced therein, the one thing that is clear and without controversy is that the area closest to the stream is the most important. The vast majority of studies I reviewed conclude that over half of the effectiveness of a riparian buffer occurs in the first 50'. That is presumably why the State of North Carolina, and the Lake Jordan Watershed Rules require a 50' buffer. Most State's Model Riparian Buffer Regulations are either 50" buffers or 100' buffers. Most studies show significantly diminishing returns to buffer effectiveness between 100' and 150' in width. Chapel Hill's buffer width is the widest I have come across in my research for non-coastal areas at 150'.

As it applies to the Bridgepoint site, I have attached Exhibit "A" to illustrate the proposed disturbance above what the Land Use Ordinance permits. It is a narrow red sliver less than 10' wide and limited to a fraction of the buffers length along the small stream. I have also included Exhibit "B" which illustrates the proposed disturbance as it relates to what is permitted within the Land Use Ordinance. The important point brought out in this exhibit is that we are not disturbing anything in the first 50' (Streamside Zone) of the RCD while the Land Use Ordinance allows 20% disturbance. This is the most critical zone according to all

reviewed sources. In the next 50' (Managed Use Zone) we are disturbing 22% where the Land Use Ordinance allows 40%. This is the second most critical zone according to all reviewed sources. It is only in the last 50' of the 150' stream buffer that we are exceeding what the Land Use Ordinance allows. This area, as referenced above, is a thin sliver, on one side of the stream, approximately 10' wide. This is in the least sensitive area of the three zones where studies show the riparian buffer exhibits diminishing returns to additional width. Please note that since we last met, we have reduced the disturbance in the Managed Zone of the RCD from 25% to 22%, and in the Upland Zone from 79% to 58%.

Chapel Hill has one of the widest stream buffers, if not the widest in the region. However, I am not suggesting that Chapel Hill revise its RCD regulations. What I am suggesting is that with the limited availability of developable property in Chapel Hill that in cases where other Town goals are being met, that exceptions may be in the best interest of the community. Bridgepoint is providing the first middle income housing proposed in over a decade, and the largest affordable homes the Community Home Trust has ever acquired. It is providing an entrance to the Towns 2200 Homestead Road site so that when the time comes the community will have two safe and efficient entrances, in addition to other traffic and bike lane improvements. In this case we believe a small exception to the regulations, that will be restored almost immediately, may be in the best interest of the community. Please let me know if I can provide any additional information or answer any questions.

Best Regards, Eric Chupp

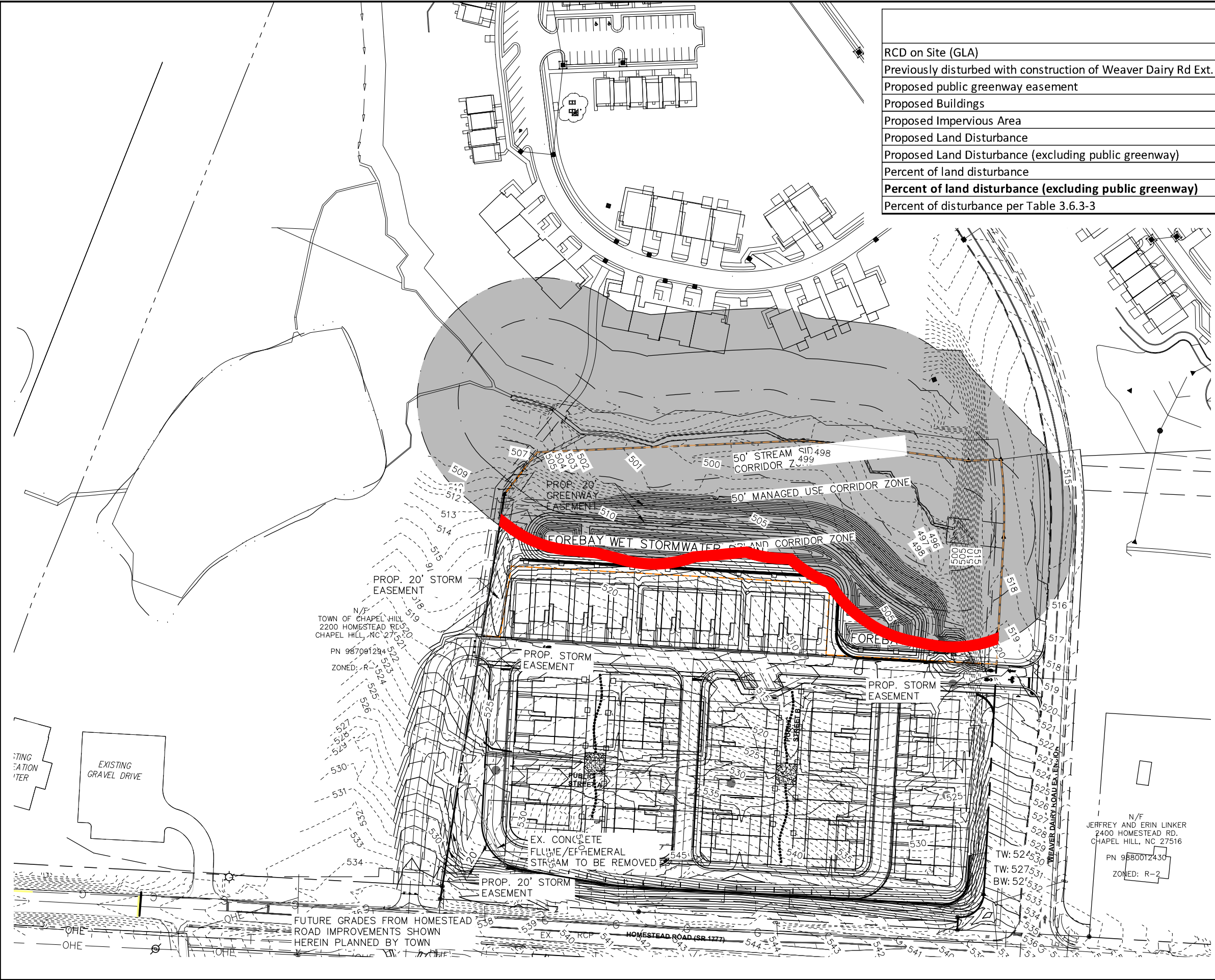
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Bridgepoint RCD Table



<i>RCD Zones</i>	<i>Allowable Disturbed Area*</i>	<i>Initially Proposed Disturbed Area</i>	<i>Proposed Disturbed Area</i>	<i>Net Disturbed Area</i>
<i>Creekside</i>	20%	0%	0%	20% less disturbed area than permitted by LUO
<i>Managed</i>	40%	55%	22%	18% less disturbed area than permitted by LUO
<i>Upland</i>	40%	79%	58%	18% more disturbed area than permitted by LUO

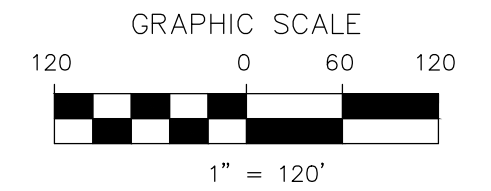
* Per Section 3.6.3-3 Chapel Hill Land Use Ordinance

	RCD Areas (sf)		
	50-ft Stream Side	50-ft Managed Use	50-ft Upland
RCD on Site (GLA)	34,206	40,291	44,966
Previously disturbed with construction of Weaver Dairy Rd Ext.	6,088	12,150	14,959
Proposed public greenway easement	0	8,119	4,790
Proposed Buildings	0	0	0
Proposed Impervious Area	0	0	259
Proposed Land Disturbance	0	17,058	30,810
Proposed Land Disturbance (excluding public greenway)	0	8,939	26,020
Percent of land disturbance	0	42%	69%
Percent of land disturbance (excluding public greenway)	0	22%	58%
Percent of disturbance per Table 3.6.3-3	20%	40%	40%



LEGEND

-  EXISTING 150-FEET RCD
-  18% OVER 40% = 8,093 SF



RCD ENCROACHMENT EXHIBIT for BRIDGEPOINTE

TOWN OF CHAPEL HILL ORANGE COUNTY NORTH CAROLINA



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