

Capkov Ventures

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



a Kovens Company

Dear Storm Water Advisory Board,

Capkov Ventures Inc., the Applicant for the Merin Road project, would like to respond to the comments made at the February 23rd, 2016 Storm Water Advisory Board meeting. We would also like to comment on the preliminary recommendations made by the Board and suggest measures that can be taken by the Applicant to improve the effectiveness of the storm water provisions within the Chapel Hill Land Use Management Ordinance.

- 1) The Chapel Hill Land Use Management Ordinance limits the disturbance of steep slope (slopes greater than 25%) to less than 25%. The Board expressed concerns that the disturbance of steep slopes will increase the likelihood of erosion and storm water control issues.

Response; After conducting a field evaluation of the steep slopes shown on the Special Use Permit plan set it was discovered that the majority of the steep slopes on the site were man made resulting from grading associated with the construction access roads into the site. The steep slopes show up on the edges of the road beds where they were graded. The Land Use Management Ordinance excludes these slopes from the steep slope analysis. The remaining areas of steep slopes are predominantly narrow strips of land where the slopes result from fallen trees, old retaining walls, or old refuse dumps. These amount to only 1,847 square feet in total or approximately 1/25th of an acre. The disturbed area is only 1,414 square feet. Please see Exhibit A. The land disturbance associated with the minimal steep slopes will have no impact on Applicants ability to control runoff or implement effective storm water controls.

At the request of some of the neighbors to the site, members of the Friends of Bolin Creek, and members of the Storm Water Advisory Board, the Applicant hosted a site visit where the site was walked from one end to the other. Chapel Hill Engineering and Planning Staff also attended the walk. Special attention was given to existing drainage patterns, the proposed location of the roadway and homes, and steep slopes. The general comments received from those who attended was a sense of assurance that steep slopes would not present any significant problems for the site.

- 2) The Storm Water Advisory Board expressed concern about the possibility of the entire site being clear cut during the development phase and the impact this may have on the Applicants ability to control storm water and effectively implement erosion control devises.

Response; The Applicant made the decision not to clear cut the site prior to

submission of the initial Special Use Permit Application. The decision was based on a combination of factors including initial feedback from the Planning Staff, comments from the concept plan reviews, the overall marketability of the site, and the Applicants 25 years' experience in developing similar sites in Chapel Hill. When the initial clearing and grading is done the Applicant will have cleared enough of the site to build only the public infrastructure (ie street, water, sewer, & storm drainage) , install required erosion control measures and sediment basins, provide a staging area for construction equipment, balance the cut and fill requirements of the site, and build the 9 affordable town homes. The rest of the site will remain forested until such time as we clear lots for home construction. Typically we will build three or four speculative homes so that homes are available to those that can't wait 6-9 months for delivery. Any additional home construction would be based on pre-sale contracts from purchasers. The Applicant will agree to a stipulation being added to the Special Use Permit restricting the number of single family homes constructed at one time within the three drainage areas. Please find attached a plan sheet labeled Exhibit B illustrating the three drainage areas on the site draining to erosion control and sediment basins 1-3. Basin number one has twenty- seven (27) single family lots draining to it, basin number two has twenty-seven (27) single family lots draining to it, and basin number three has eight (8) single family lots draining to it. The Applicant will agree to clear no more than four (4) lots within each drainage area for speculative home construction at one time. Prior to building any additional speculative homes in a given drainage area one or more of the lots initially cleared will need to be landscaped, have ground cover installed, and have a Certificate of Occupancy from the Town of Chapel Hill. This shall not constrain the construction of pre-sale homes. By agreeing to this stipulation the Applicant is guaranteeing that no developer or builder will be able to clear cut the site for development or construction.

- 3) The Board has expressed concerns about the wording of stipulation #35 within Resolution A approving the Merin Road community. The stipulation states;

"That this project must comply with Section 5.4 Storm water Management of the Land Use Management Ordinance or whatever storm water regulations are applicable at the time of the issuance of a Zoning Compliance Permit. If the storm water regulations change as a result of legislation approved by the General Assembly, the Applicant shall conform to the applicable regulations."

The Storm Water Advisory Boards preliminary recommendation was to remove the last sentence of the stipulation. The Planning Staff then recommended that all language after; "That this project must comply with Section 5.4 Storm water Management of the Land Use Management Ordinance." Be removed.

Response; The Applicant agrees to the suggested modifications to Stipulation #35 in Resolution A Suggested by the Storm water Advisory Board and the Planning Staff.

- 4) The Board has expressed concerns about the sufficiency of using the 10 year storm in sizing the erosion control and sediment basins constructed in the Merin Road community. The Board has suggested that the Applicant consider using the 25 year storm in sizing the erosion control and sediment basins.

Response; The Applicant believes that the erosion control sediment basins are adequately sized, and that the pond sizing proposed by the Applicant substantially exceeds what is required by the Chapel Hill Land Use Management Ordinance and Orange County Erosion Control. The Merin Road project as proposed has three (3) erosion control sediment basins. All three are to be located in the same areas that the permanent storm water quality and control ponds will be located. The erosion control and sediment ponds are temporary devices which will be converted to the permanent storm water quality and control ponds when 80%- 90% of the homes have been constructed. The sizing of the temporary erosion control and sediment ponds is determined by two factors, volume and surface area. The ponds proposed by the Applicant are already designed to detain a majority of the storm water run-off volume generated by the 25 year storm event. Please see the attached Exhibit C, which highlights the 10-year required and provided volumes for each of the sediment basins. The table shows how the basins are over sized and will capture the increased run-off volume generated from the 25-year storm event. The surface area exceeds what is required but does not rise to the 25 year storm level. Expanding the surface area would require additional clearing and grading without having any significant impact on the effectiveness of the erosion control and sediment ponds. It has been the experience with the Applicant that most erosion control failures don't occur as a result of the sizing of the ponds but is frequently the result of adequately checking the effectiveness of the devices designed to handle the sediment and erosion control. Careful monitoring of field conditions as they relate to silt fence placement, silt fence and curb inlet maintenance, and verifying the proper placement of silt fence outlets will lead to more improvements in the overall erosion control plan than any adjustments that could be made in sediment basin pond surface areas. The Applicant believes that by designing the erosion control and sediment ponds to the 25 year storm volume, and by instituting weekly erosion control walks to review the effectiveness of all of the erosion control devices is the best approach.

The Applicant shall therefor proposes that a stipulation be added to the Special Use Permit requiring the Applicant to schedule weekly erosion control walks of the site and all of the erosion control devices and sediment basins. The walks shall occur on the same day and the same time each week so participants can adjust their schedules accordingly. The Applicant will invite the following participants;

- Orange County Erosion Control
- Chapel Hill Storm water Department Representative
- Friends of Bolin Creek Representative
- Development Team Representative
- Neighborhood Representatives

The Applicant believes that the combination of the measures proposed above will provide a level of storm water controls that will significantly exceed what the current Land Use Management Ordinance requires and could be used as a model for future developments in terms of erosion control and sediment monitoring.

Please recommend approval of the Merin Road community with the addition of the stipulations referenced above.

Respectfully, Eric Chupp

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[illegible]

EXHIBIT B

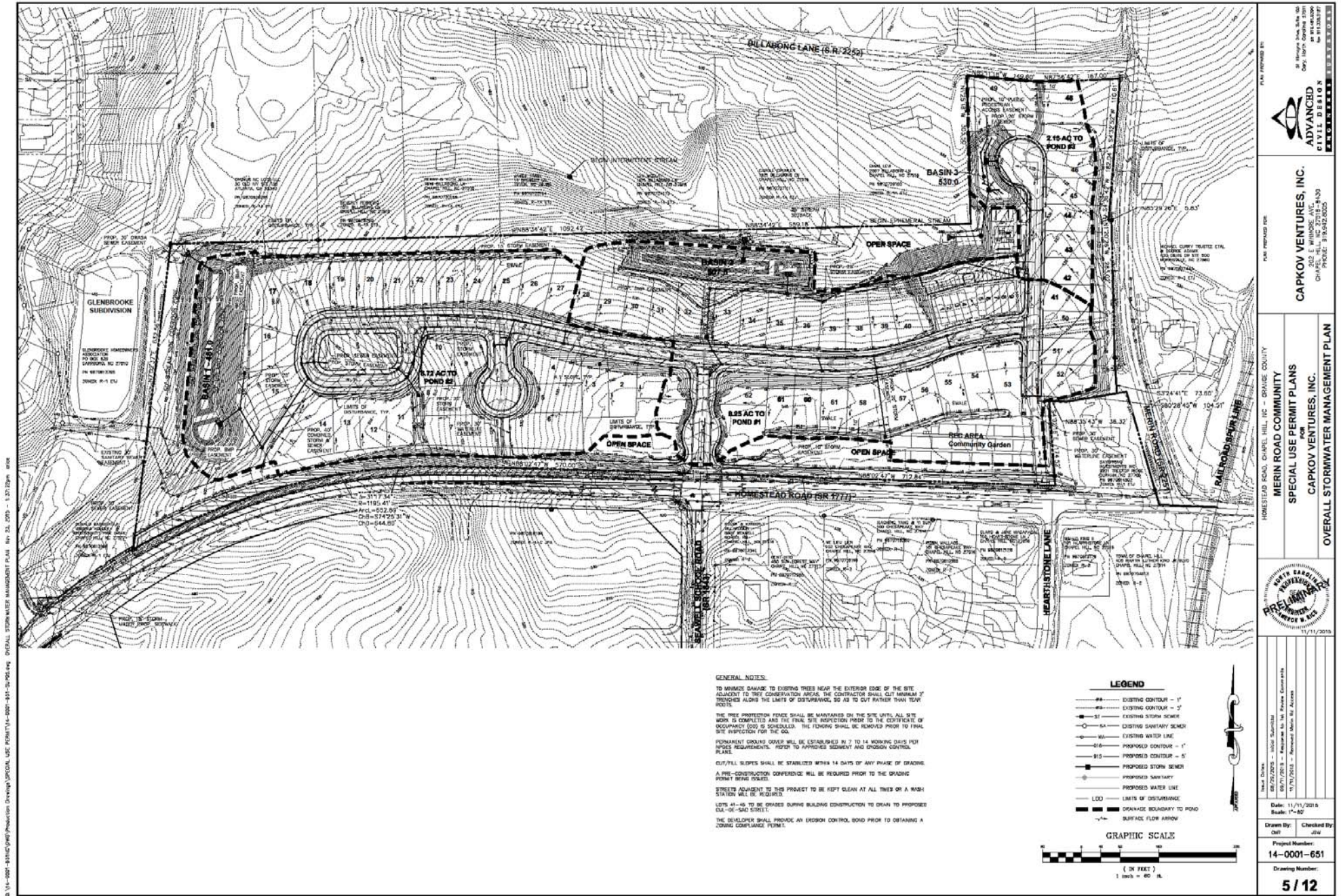


EXHIBIT C

SEDIMENT BASIN #	MINIMUM STORAGE REQUIRED (CF)	STORAGE PROVIDED (CF)	PERCENT INCREASE ABOVE MINIMUM (%)
1	15,696	60,820	287%
2	14,850	56,301	279%
3	3,762	16,961	351%