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MEMORANDUM

TO: Mayor and Town Council

FROM: W. Calvin Horton, Town Manager

SUBJECT: Cross Creek Subdivision – Application for Preliminary Plat Approval

DATE: March 25, 2002

INTRODUCTION

Tonight the Council continues the Cross Creek Public Hearing from February 18, 2002, regarding a Preliminary Plat application to authorize the subdivision of 12.78 acres into 17 residential lots. Currently, two houses exist on the two separate tracts. Both homes are proposed to be incorporated into the subdivision. Adoption of Resolution A, B, C, or D would approve a Preliminary Plat application with conditions. Adoption of Resolution E would deny the request. Resolution F would direct the Town Manager to investigate concerns expressed by the Planning Board concerning the culvert at Cedar Hills and Silo Drives.

This package of materials has been prepared for the Town Council's consideration, and is organized as follows:

- ◆ **Cover Memorandum:** Provides background information on the development proposal and the Town's review process, presents evidence in the record thus far in support of and in opposition to approval of the application, and offers recommendations for Council action.
- ◆ **Attachments:** Includes comments on issues raised during the February 18 Public Hearing, a Sass Development Company Memorandum, a standardized area map, and a copy of the Public Hearing memorandum and its related attachments.

BACKGROUND

On February 18, 2002, a Public Hearing was held for consideration of a Preliminary Plat application to authorize the creation of 17 lots for residential construction. The subject area, 12.78 acres in size, is currently comprised of two lots, each with a single-family dwelling. The proposal is to transfer the two lots into 17 lots. A new subdivision road is proposed to serve the new homesites as well as the two existing homes. In accordance with the restriction in Section 13.11 of the Development Ordinance house size limits are proposed for 3 of the lots. One of the three restricted size homes is proposed to be the existing dwelling on Tract 1.

The site is located on the south side of Weaver Dairy Road between Timberlyne Drive and Cedar Hills Drive approximately one mile east of Airport Road. The site is immediately west and north of the Cedar Hills neighborhood and east of the Kitchen property.

This is an application for a Preliminary Plat application. The Development Ordinance requires the Town Manager to conduct an evaluation of this Preliminary Plat application, to present a report to the Planning Board, and to present a report and recommendation to the Town Council. We have reviewed the application and evaluated it regarding its compliance with the standards and regulations of the Development Ordinance; we have presented a report to the Planning Board; and on February 18 we submitted our report and recommendation to the Council.

We note that review of subdivision proposals differs from review of Special Use Permits in that the question of compliance with regulations and standards is the basis for approval or denial, rather than the four findings of fact listed in Article 18 of the Development Ordinance. However the Council's review and action of a subdivision is quasi-judicial, with sworn testimony and evidence entered into the record. Please see the attached summary of key differences between legislative and quasi-judicial zoning decisions, prepared by Mr. David Owens of the Institute of Government and attached to the February 18 Public Hearing Memorandum.

The standard of review and approval of a Preliminary Plat application involves comparing the application with the regulations and standards in the Development Ordinance. The review typically focuses on vehicular and pedestrian access and circulation, traffic impact, public improvements, lot standards, and recreation area.

EVALUATION OF THE APPLICATION

Evaluation of this application centers on compliance with the subdivision regulations and standards in the Development Ordinance. The Town Council may, as a discretionary decision, allow reductions in lots size. We have included with this memorandum a checklist of the Town's subdivision regulations. The checklist indicates which of the Town's regulations are satisfied with the applicant's proposal, and recommended conditions.

The Council may find that the proposal meets the subdivision regulations and other pertinent Town regulations, or may find that the proposal does not meet the regulations.

KEY ISSUES

We believe that the key issues raised during the February 18 Public Hearing focused on stormwater issues, a pedestrian connection, the new subdivision road design, the Small House Ordinance, and the sponsorship of a Habitat for Humanity House. We offer additional information on these issues below. We have also provided a list of other questions raised during the Hearing, followed by comment from the applicant and/or Town staff, as Attachment 1 to this memorandum.

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Stormwater Issues: Several key issues concerning stormwater were raised at advisory board meetings and the February 18th Public Hearing. These issues include:

- Stormwater Management Plan
- Drainage facilities in the Resource Conservation District
- Analysis of Cedar Hills Drive culvert
- Performance Bond
- Impervious Surface

Stormwater Management Plan: Resolution A includes a stipulation that expands our typical stormwater management plan requirement. The expanded language responds to the applicant's commitment to not make the downstream drainage situation worse. At the Public Hearing, the applicant expressed concern that the methodology for demonstrating compliance with the downstream commitment is vague as it appears in Stipulation #24.

Comment: The applicant has provided a memorandum (copy attached) which indicates that an engineer has been hired to calculate and demonstrate that the proposed development will not make the downstream conditions worse. The applicant has indicated that these calculations will be available prior to March 25.

Storm drainage features in the drainage easements: A Council member asked if Lot 14 would be usable if the 30-foot drainage easement were located entirely outside the Resource Conservation District.

Comment: A 30-foot drainage easement is proposed along the eastern top of the Resource Conservation District. Vegetated swales and level spreaders are proposed to be located in the drainage easements. The grass-lined swales are proposed to channel stormwater. The vegetated lining is intended to absorb pollutants and filter and settle suspended solid matter, typically soil particles. The level spreaders are proposed to act as catch basins at the terminus of the swales. When the basin part of the level spreader fills up with collected water, it overflows a raised "lip" and sheets water downhill to the Resource Conservation District. It spreads the water out over an area rather than a single point of disseminating water, as with a drain pipe that empties water at one place. The proposed 30-foot easement overlaps the outer edge of the Resource Conservation District by 10 feet. The swales and level spreaders are proposed to be located outside the Resource Conservation District.

We continue to recommend that the entire storm drainage easement be located outside of the Resource Conservation District. Stipulation # 26 of Resolution A includes this requirement. We note that although the building area for Lot 14's building envelope will be decreased, we believe by shifting the easement, the lot will still be usable.

Analysis of the Cedar Hills Drive Culvert: The Planning Board has provided a recommendation in response to concerns made by property owners adjacent to Cedar Creek concerning creek bank overflow. The Board's recommendation, included as Resolution F, would direct that the Town

Manager study the impact of flooding in this area and prepare a report to the Council. Of special concern was the ability of the culvert under Cedar Hills Drive to handle any stormwater increase.

Comment: We have included a resolution representing the Planning Board's secondary recommendation. The study, as recommended, would not be tied to this subdivision proposal. If the Town Council adopts the resolution, we will add this to the list of items requiring study and conduct further study of the downstream situation as time permits. The attached Resolution F, if adopted, would ask the Town Manager to arrange for such a study.

Performance Bonds: A Council member asked if a stipulation could be added to Resolution A requiring a Performance Bond that neighbors and the Town could draw on if the Best Management Practices, as proposed, were to fail to impact the rate of stormwater entering the culvert.

Comment: There are no ordinance provisions that would require private developers to post performance bonds for Best Management Practices, other than those Best Management Practices required in conjunction with the State-mandated Water Supply Watershed Protection regulations. We note that the primary reason for the State-mandated Watershed bonding/performance guarantee requirement is that the Town is ultimately responsible for the performance of those Best Management Practices under State law, in Water Supply Watershed areas. We do not recommend that the Town establish a requirement that a developer post a performance bond for all Best Management Practices because such a requirement implies that the Town is assuming responsibility for the performance of the private Best Management Practices. The Town does not have sufficient inspection or administrative resources to practically assume and enforce such a responsibility Town-wide.

Impervious Surfaces: Several issues concerning impervious surface were raised at advisory board meetings and the February 18 Public Hearing. The issues primarily involve the Transportation Board's recommendation that there be a 5-foot sidewalk on each side of the subdivision road and that the travelway width of the new road be reduced from 11 feet to 10 feet.

Comment: The Town standard for local roadways is for sidewalk on one side of the road. In order to reduce impervious surface and because of the low level of expected pedestrian movement, we do not believe that a 5-foot sidewalk on each side of the new road is necessary.

The Town has adopted the State and national standard travelway width of 11 feet for local roads. We believe that this width provides the best maneuverability for normal vehicle traffic and emergency access. We continue to recommend an 11-foot width. The Council may choose to authorize a reduced width travelway. The applicant has indicated (in the attached memorandum) that the stormwater measures proposed require the curb and gutter cross-section rather than a swale cross-section.

Swales versus Curb and Gutter: At the Public Hearing, there was a discussion about the language in Resolution A that would allow either a curb and gutter cross-section or a swale cross-section for the proposed roadway.

Comment: The applicant stated that the proposed stormwater management plan for the site requires the use of a curb and gutter cross-section. We understand that the alternative use of swales instead of curb and gutter would prohibit the implementation of the applicant's proposed stormwater facilities.

Pedestrian Connection: The issue of the location and necessity of a pedestrian connection was raised by a resident of the Cedar Hills neighborhood. An existing pedestrian easement is platted on the neighbor's property. He stated that the purpose of the easement was questionable, because it did not connect to a greenway nor did it have a destination. It also appeared to run into a culvert in his front yard. The neighbor did not want an improved pedestrian connection to the subdivision. He did not object to an informal path.

Comment: We continue to recommend that the pedestrian connection proposed with this application be unimproved. We recommend that a 20-foot unimproved pedestrian connection be platted and deeded to the Homeowners' Association and connect with the existing easement on the adjacent Cedar Hills lot. We believe that it is likely that an informal path may develop along the corridor.

Subdivision Road Design: The road design proposed as part of this application would result in removal of a 31-inch white oak tree.

Comment: Following the Public Hearing, the applicant has indicated (in the attached memorandum) that the tree is worthy of preservation and that the applicant accepts the Town Manager's recommended stipulation which requires a road design to save the tree.

Small House Ordinance: As a Major Subdivision application, this proposal is subject to Article 13.11 of the Chapel Hill Development Ordinance. Based on Section 13.11, this proposal must restrict the size of houses that may be constructed on 3 of the 17 residential lots. One of these lots must have restrictions limiting the initial construction of the house to 1,100 square feet in size. Two lots must have houses with no more than 1,350 square feet of floor area. The submitted site plan identifies 3 lots on which a size-limited unit must be constructed.

This issue was addressed in the February 18 Public Hearing materials. The applicant proposes to deconstruct an existing house on Lot 16 to comply with the 1,350 square foot floor area restriction. The applicant also proposes to provide two lots with new homes of 1,100 square feet of floor area and one with 1,350 square feet of floor area. Council members expressed concern that the proposed deconstruction of an existing house appeared to circumvent the small house requirement.

Comment: We believe that the deconstruction of the existing house meets the ordinance requirement for restricting house size on this lot.

Habitat for Humanity House: The applicant has offered, in the attached memorandum provided subsequent to the Public Hearing, to sponsor 100 percent of a Habitat for Humanity House if the Cross Creek subdivision obtains Council approval.

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Comment: We understand that Habitat for Humanity in Orange County has been made aware of this offering and is searching for a suitable lot within the Chapel Hill city limits. We believe that the applicant is contributing to the pool of affordable houses with this offer. We have revised Resolution A to include this offering as a condition of approval.

RECOMMENDATIONS

Recommendations are summarized below. Please see summaries of board actions and recommendations in the attachments.

Planning Board's Recommendation: The Planning Board reviewed this proposal on January 8, 2002 and voted 6-1 to recommend that the Council approve the application with the adoption of Resolution B.

Resolution B differs from Resolution A in the following ways:

- Board Recommendation: That stipulation #6 requiring an alternative road design in order to preserve the 31" white oak be deleted.

Comment: We have included the stipulation requiring preservation of the 31-inch oak in the Manager's recommendation, Resolution A. It is a specimen deciduous tree in moderate condition. It is also the only deciduous tree on the property of such proportion. The subdivision road realignment would change the configuration of several lots on the southern portion of the site. Resolution A requires the retention of the white oak tree and that the applicant include tree protection fencing around the critical root zone of the tree as a part of a Landscape Protection Plan.

- Board Recommendation: That the pedestrian connection be a twenty-foot, unimproved easement deeded to the Homeowners' Association.

Comment: We have included this stipulation in the Manager's recommendation, Stipulation # 8.

- Board Recommendation: That the stipulation requiring a Type "B" buffer along the western property line be deleted.

Comment: We have deleted this buffer requirement stipulation. It was made in error. No buffer is required between a major subdivision and vacant land or land used for a single dwelling.

- Board Recommendation: That the width of the drainage easement be 30 feet in a drainage easement deeded to the Homeowners' Association outside the Resource Conservation District.

Comment: We have included this stipulation in the Manager's recommendation. The 30-foot drainage easement along the eastern top of the Resource Conservation District must have its full 30 foot width entirely out of the Resource Conservation District. It is anticipated that routine maintenance will require 10 feet around the constructed stormwater drainage structures. Given

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the area required for maintenance and to minimize land disturbance in the Resource Conservation District, the storm drainage easement should be located entirely outside the Resource Conservation District.

- **Board Recommendation:** That stipulation #27 describing construction vehicle traffic in the Construction Management Plan provide for an exception. The Plan states that no construction vehicles serving the site use streets in the Cedar Hills Subdivision. A sewer line extension from a sewer line located on Cedar Hills Drive is proposed to be accessed from the eastern property line.

Comment: We have included this exception to the Construction Management Plan (stipulation #27) in the Manager's recommendation, Resolution A.

Planning Board Secondary Recommendation: The Planning Board has recommended that the Council ask the Town Manager to arrange for a study of the downstream stormwater management issues, particularly as they relate to the size of the culvert under Cedar Hills Drive. The study, as recommended, would not be tied to this subdivision proposal.

Comment: We have included a resolution representing the Planning Board's secondary recommendation. If the Town Council adopts the resolution, we will add this to the list of items requiring study and conduct further study of the downstream situation as time permits.

The attached Resolution F, if adopted, would ask the Town Manager to arrange for such a study.

Please see the attached Planning Board Summary of Action.

Transportation Board Recommendation: The Transportation Board reviewed this application on January 15, 2002 and voted 4-3 to recommend that the Council adopt Resolution C. Resolution C differs from the Manager's Revised Recommendation, Resolution A, on three issues:

- **Board Recommendation:** That the proposed local street be constructed with two 10' travel lanes.

Comment: We believe that The Transportation Board's recommendation for reduced width of travelway pavement from the recommended 11 feet to 10 feet reduces impervious surface but at the same time may impact maneuverability of normal subdivision traffic as well as service vehicle access to the subdivision. When there is on-street parking, the problem of clearance would be compounded. We have not included this stipulation in the Manager's recommendation.

- **Board Recommendation:** The Board recommended that 5-foot sidewalks be constructed on both sides of the subdivision road.



Comment: We have not included this recommendation in Resolution A, the Manager's recommendation. We believe that a single sidewalk is sufficient to serve this subdivision and the increase in impervious surface is not recommended.

- **Board Recommendation:** The Board recommended that the developer be required to provide a small neighborhood park rather than payment-in-lieu for recreation improvements.

Comment: We have not included this recommendation in Resolution A. We believe that a small park would not be justified. We believe that the community park, Cedar Falls Park, located within a mile of the subdivision, is better equipped to provide all ages with a wide variety of recreational opportunities.

Please see the attached Transportation Board Summary of Action.

Bicycle and Pedestrian Advisory Board Recommendation: The Bicycle and Pedestrian Advisory Board reviewed this development proposal on January 22, 2002 and voted 6-0 to recommend the adoption of Resolution D.

- **Board Recommendation:** That the pedestrian connection requiring an unimproved, 20-foot wide easement deeded to the Homeowners' Association.

Comment: We agree with this recommendation.

Please see the attached Bicycle and Pedestrian Advisory Board Summary of Action.

Chapel Hill Parks and Recreation Commission Recommendation: The Chapel Hill Parks and Recreation Commission reviewed this application on January 18, 2002 and voted 8-0 to recommend that the Council approve the plan for the Cross Creek Subdivision.

- **Board Recommendation:** The Commission recommended that a stipulation be added to Resolution A that the developer provide a payment-in-lieu of providing recreation space. The Commission recommended that payment-in-lieu proceeds be used at Cedar Falls Park and/or the Dry Creek Greenway.

Comment: We recommend the payment-in-lieu be provided and that the proceeds be used at one of the community recreation areas close to the site.

Manager's Revised Recommendation: We recommend that the Council approve this Preliminary Plat application with the conditions listed in Resolution A.

Resolution A has been revised to include the applicant's proposal to sponsor a Habitat for Humanity House in Chapel Hill and to include a stipulation requiring that a sign be posted at the end of the new roadway indicating that it may be extended in the future.

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Resolution B would approve the application as recommended by the Planning Board.

Resolution C would approve the application as recommended by the Transportation Board.

Resolution D would approve the application as recommended by the Bicycle and Pedestrian Advisory Board.

Resolution E would deny the application.

Resolution F would adopt the Planning Board's secondary recommendation.

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**Cross Creek Subdivision
Preliminary Plat**

DIFFERENCES AMONG RESOLUTIONS

ISSUE	Resolution A Manager's Revised Recommendation	Resolution B Planning Board's Recommendation	Resolution C Transportation Board's Recommendation	Resolution D Bicycle and Pedestrian Advisory Board Recommendation
Weaver Dairy Road Improvements	Payment-in-lieu of curb&gutter and sidewalk	Payment-in-lieu of ½ of a 4-lane median divided cross-section	Payment-in-lieu of ½ of a 4-lane median divided cross-section	Payment-in-lieu of ½ of a 4-lane median divided cross-section
Redesign subdivision road to preserve oak tree	Yes	No	*	Yes
Pedestrian easement 20' & unimproved	Yes	Yes	*	Yes
Type "B" buffer requirement removed	Yes	Yes	*	*
Drainage Easement outside the RCD	Yes	Yes	*	*
Construction Management Plan to allow sewer extension	Yes	Yes	*	*
Subdivision street (2) 11' travel lanes	Yes	Yes	No (10' lanes)	Yes
5-foot sidewalks on one side of subdivision street	Yes	Yes	No (both sides)	Yes
Developer provide payment-in-lieu for recreation area	Yes	Yes	No (park)	Yes
Expanded Stormwater Management Stipulation	Yes	*	*	*
Habitat for Humanity House sponsorship in Chapel Hill	Yes	*	*	*

* Issue was not discussed at this particular meeting and is therefore not included in this Resolution

**ATTACHMENTS**

1. List of Questions and Issues raised during the February 18, 2002 Public Hearing (p. 24)
2. Sass Development Company Memorandum (p. 25)
3. Standardized Area Map (p. 27)
4. February 18, 2002 Public Hearing and Related Attachments (p. 28).

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RESOLUTION A
(Manager's Revised Recommendation)

A RESOLUTION APPROVING AN APPLICATION FOR A PRELIMINARY PLAT FOR CROSS CREEK SUBDIVISION (2002-03-25/R-16a)

BE IT RESOLVED by the Council of the Town of Chapel Hill that it finds that the Cross Creek Subdivision, proposed by Design Response, on the property identified as Chapel Hill Township Tax Map 25, Lots 2 and 2C, if developed according to the preliminary site plan dated December 5, 2000, revised October 11, 2001, and the conditions listed below, would comply with the provisions of the Development Ordinance:

These findings are based on the following:

Stipulations Specific to the Development

1. Expiration of Preliminary Plat: That this Preliminary Plat approval shall be valid for one year from the date of approval subject to reapproval by the Town Manager in accordance with the provisions of the Development Ordinance.
2. Number of Lots and Floor Area Restrictions: That this approval shall authorize the creation of 17 lots on 12.78 acres with Lots 16 and 17 each restricted to a dwelling unit with no more than 1,350 square feet of floor area and Lot 2 is restricted to a dwelling unit with no more than 1,100 square feet of floor area.

Lot 16 shall be deconstructed to comply with the 1,350 square foot restricted floor area size. Deconstruction shall be completed prior to Town Manager approval of the Final Subdivision Plat.

These restrictions shall be referenced in the Homeowners' Association documents.

3. Habitat for Humanity House: That the applicant provide 100 percent sponsorship of a Habitat for Humanity house in the Chapel Hill city limits.

Required Improvements

4. New Road: That the new road shall be constructed either:
 - To a 30-foot right-of-way to include a 22-foot pavement section, with adjacent 5-foot sidewalk on the west side of the road and a 3-foot shoulder, swales in drainage easement deeded to the Homeowners' Association outside the right-of-way; or
 - To a 50-foot right-of-way to include a 22-foot pavement section, 30-inch curb and gutter and 5-foot sidewalk.

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5. Payment-in-Lieu for Weaver Dairy Road Improvements: We recommend that the applicant dedicate an additional 15 feet of right-of-way on the Weaver Dairy Road frontage and provide a payment-in-lieu for curb and gutter and for sidewalk.

The applicant shall provide a conceptual design and a cost estimate for a determination of the amount of payment prior to the issuance of a Zoning Compliance Permit. The payment shall be made prior to approval of the final plat.

6. Weaver Dairy Road Right-of-Way: That the applicant shall dedicate an additional 15 feet of right-of-way along the Weaver Dairy Road frontage.
7. Alternative Road Design for White Oak Tree Protection: An alternative subdivision road design shall be provided which would preserve the 31-inch white oak tree. The applicant shall include tree protection fencing around the critical root zone of the tree as part of the Landscape Protection Plan.

Stipulations Related to Recreation

8. Payment-in-Lieu for Minimum Recreation Requirements: That the developer provide a payment-in-lieu of providing a minimum of .91 acres of recreation area for this development. The payment amount shall be approved by the Town Manager in accordance with the Development Ordinance, Section 17.9.5.

The recreation payment amount shall be approved by the Town Manager prior to issuance of a Zoning Compliance Permit and shall be paid prior to approval of the final plat. We recommend that the payment-in-lieu proceeds be used at Cedar Falls Park and/or the Dry Creek Greenway.

9. Pedestrian Connection: That the pedestrian connection be provided as a twenty-foot wide strip of land, deeded to the Homeowners' Association. The strip of land shall contain an unimproved public pedestrian and non-motorized vehicular easement.

Stipulations Related to Resource Conservation District

10. Boundaries: That the boundaries of the Resource Conservation District be indicated on the final plat and plan. A note shall be added to all final plats and plans, indicating, "Development shall be restricted within the Resource Conservation District in accordance with the Chapel Hill Development Ordinance."
11. Variances: That all variances necessary for development within the Resource Conservation District be obtained before application for final plat or Final Plan approval for the subject phase(s) of development.
12. Buildable Lots: That no lot be created that would require a Resource Conservation District Variance in order to be built upon.



In addition, for each lot it must be demonstrated that there is sufficient buildable area outside the Resource Conservation District, slopes of 25% or greater, water quality vegetated buffers, other required landscape buffers, easements, and any applicable building setback limits.

13. **Construction Standards:** That for the roadway encroachment into the Resource Conservation District, the requirements and standards of Subsections 5.6 and 5.8 of the Development Ordinance and all other applicable Resource Conservation District regulations must be adhered to, unless the application is granted administrative exemptions from provisions of Subsection 5.8.

All required erosion control sediment basins and stormwater improvements, outside the public right-of-way, including associated clearing and grading, shall be located entirely outside of the Resource Conservation District. All grading associated with the construction of a residence shall be located entirely outside of the Resource Conservation District.

Stipulations Related to Steep Slopes

14. **Steep Slopes:** That each submittal for Final Plan approval shall include a map showing lots and street segments on slopes of 10% or more, and indicating how the development and construction will comply with the steep slopes regulations in the Development Ordinance:
- for slopes of 10 - 15%, site preparation techniques shall be used which minimize grading and site disturbance;
 - for slopes of 15 - 25%, demonstrate specialized site design techniques and approaches for building and site preparation; and
 - for slopes of 25% or greater, provide a detailed site analysis of soil conditions, hydrology, bedrock conditions, and other engineering or environmental aspects of the site.

Each Final Plan application shall demonstrate compliance with the steep slopes regulations in the Development Ordinance. The Town Manager shall decide if the proposed building and site engineering techniques are appropriate. These restrictions shall be referenced in the Homeowners' Association documents.

15. **Required Landscape Bufferyard:** The following landscape buffer is required for this subdivision:
- Type "D" landscape bufferyard (minimum 30-foot width) along the property's frontage with Weaver Dairy Road

The Landscape buffer shall be on land deeded to the Homeowners' Association.

16. **Landscape Protection Plan:** That a Landscape Protection Plan be approved by the Town Manager prior to issuance of a Zoning Compliance Permit. The Landscape Protection Plan shall include tree protection fencing between infrastructure construction and existing vegetation to be retained in the following locations:

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- a) The required landscape bufferyards;
- b) Adjacent to any construction within the Resource Conservation District; and
- c) Between construction and rare and specimen trees to remain.

That all tree protection fencing shall be installed at a distance from the base of the tree equal to at least one foot per diameter at breast height (dbh).

17. Landscape Planting Plan: That a Landscape Planting Plan be approved by the Town Manager prior to issuance of a Zoning Compliance Permit. The plan must indicate how the required bufferyards will meet the minimum landscape planting standards. The Landscape Planting Plan shall also include a plant list, indicating type, size and number of proposed plant.

Stipulations Related to Homeowners' Association

18. Homeowners' Association: That a Homeowners' Association be created that has the capacity to place a lien on the property of a member who does not pay the annual charges for maintenance of common areas, however designated. The Homeowners' Association documents shall be reviewed and approved by the Town Manager prior to recordation at the Orange County Register of Deeds Office and shall be cross-referenced on the final plat.

Stipulations Related to Water, Sewer, and Other Utilities

19. Utility/Lighting Plan Approval: That the final utility/lighting plan be approved by Duke Power Company, Orange Water and Sewer Authority, BellSouth, Public Service Company, Time Warner Cable, and the Town Manager prior to issuance of a Zoning Compliance Permit.
20. OWASA Easements: That easement documents as required by OWASA and the Town Manager be recorded concurrently with the final plat. That the final plat shall be approved by OWASA prior to Town approval.
21. Placement of Utility Lines Underground: That the final plans indicate that all new utility lines shall be placed underground.
22. Fire Flow: That a fire flow report, prepared by a registered professional engineer, and showing that flows meet the minimum requirements of the Design Manual, be approved prior to issuance of a Zoning Compliance Permit.
23. Fire Hydrant Spacing: That maximum spacing between fire hydrants shall not exceed 500 feet, unless modified by the Town Manager.

Miscellaneous Related To Stormwater Management

24. Stormwater Management Plan: That prior to the issuance of a Zoning Compliance Permit the applicant submit a Stormwater Management Plan for review and approval by the Town Manager. The plan shall demonstrate that the drainage situation downstream with the

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subdivision proposal is no worse than it is on the date of this adopted resolution, according to methodology approved by the Town Manager. The plan shall be based on the 1-year and 50-year frequency, 24-hour duration storms, where the post-development stormwater run-off rate shall not exceed the pre-development rate. Engineered stormwater facilities shall also remove 85% total suspended solids and treat the first inch of precipitation utilizing NC Division of Water Quality design standards. All stormwater management improvements outside public right-of-way must be located within storm drainageway easements and shall not be permitted within approved bufferyard areas.

25. **Best Management Practices:** That the level spreader design utilize design methods, based on best available information from the NC State University Cooperative Extension. Final design and locations shall be reviewed and approved by the Town Manager prior to the issuance of a Zoning Compliance Permit. These features shall not be permitted within approved bufferyard areas.

The level spreader BMP's shall be designed to adequately treat the first one inch of rainfall from the developed sites.

26. **Storm Drainageway Easement:** That all stormwater management improvements outside public right-of-way be located within reserved storm drainage way easements, of a 30 foot width minimum and be entirely outside the Resource Conservation District.

All proposed drainage swales and constructed stormwater facilities shall be in drainage easements deeded to the Homeowners' Association.

27. **Public and private stormwater drainage curb hood/covers** shall be pre-cast stating, "Dump No Waste! Drains to Jordan Lake", in accordance with the specifications of the Town Standard Detail SD-5A.

Miscellaneous Stipulations

28. **Construction Management Plan:** That a Construction Management Plan, indicating how construction vehicle traffic will be managed, be approved by the Town Manager prior to the issuance of a Zoning Compliance Permit. That the Construction Management Plan specify that no construction vehicles serving this site may use any existing streets within the Cedar Hills Subdivision with one exception: that Cedar Hills Drive may be used for construction traffic to extend the sewer line from Cedar Hills Drive to the east side of the proposed subdivision.
29. **Solid Waste Management Plan:** That a Solid Waste Management Plan, and a plan for managing and minimizing construction debris, shall be approved by the Town Manager prior to the issuance of a Zoning Compliance Permit.
30. **Open Burning:** That the open burning of trees, limbs, stumps and construction debris association with this development is prohibited unless it is demonstrated to the Town Manager or his designee that no reasonable alternative means are available for removal of the materials from the subject property. The Fire Marshall may establish safety standards, which must be met in order to receive a permit under this Article.

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31. **Detailed Plans**: That final detailed site plans, grading plans, utility/lighting plans, stormwater management plans (with hydrologic calculations), and landscape plans and landscape maintenance plans be approved by the Town Manager prior to issuance of a Zoning Compliance Permit, and that such plans conform to the plans approved by this application and demonstrate compliance with all applicable conditions and the design standards of the Development Ordinance and the Design Manual.
32. **As-Built Plans**: That as-built plans in DXF binary format using State plane coordinates, shall be provided for street improvements and all other existing or proposed impervious surfaces prior to issuance of the first Certificate of Occupancy.
33. **Plant Rescue**: That the applicant consider conducting plant rescue activities on the site prior to initiation of development activity.
34. **Certificates of Occupancy**: That no Certificates of Occupancy be issued until all required public improvements are completed; and that a note to this effect shall be placed on the final plat.

That if the Town Manager approves a phasing plan, no Certificates of Occupancy shall be issued for a phase until all required public improvements for that phase are complete; no Building Permits for any phase shall be issued until all public improvements required in previous phases are completed to a point adjacent to the new phase, and that a note to this effect shall be placed on the final plat.
35. **Erosion Control**: That a detailed soil erosion and sedimentation control plan, including provision for maintenance of facilities and modifications of the plan if necessary, be approved by the Orange County Erosion Control Officer and the Town Manager prior to issuance of a Zoning Compliance Permit.

That a performance guarantee be provided in accordance with Section 5-97.1 of the Town Code of Ordinances prior to issuance of any permit to begin land-disturbing activity.

All erosion control sediment basins, including associated clearing and grading, be located entirely outside of the Resource Conservation District.
36. **Silt Control**: That the applicant takes appropriate measures to prevent and remove the deposit of wet or dry silt on adjacent paved roadways.
37. **Street Names and Addresses**: That the name of the development and its streets and house numbers be approved by the Town Manager prior to the issuance of a Zoning Compliance Permit.
38. **Street Stubout Signage**: That a sign, reading "Roadway subject to future extension" shall be posted at each roadway stubout.



39. Construction Sign: That the applicant post a construction sign that lists the property owner's representative and telephone number, the contractor's representative and telephone number, and a telephone number for regulatory information at the time of issuance of a Building Permit, prior to the commencement of any land disturbing activities. The construction sign may have a maximum of 16 square feet of display area and may not exceed 6 feet in height. The sign shall be non-illuminated, and shall consist of light letters on a dark background.
40. Continued Validity: That continued validity and effectiveness of this approval is expressly conditioned on the continued compliance with the plans and conditions listed above.
41. Non-severability: That if any of the above conditions is held to be invalid, approval in its entirety shall be void.

NOW, THEREFORE, BE IT RESOLVED by the Council of the Town of Chapel Hill that the Council hereby approves the application for a Preliminary Plat for the Cross Creek Subdivision in accordance with the plans and conditions listed above.

This the 25th day of March, 2002.

(49)

RESOLUTION B
(Planning Board Recommendation)

A RESOLUTION APPROVING AN APPLICATION FOR A PRELIMINARY PLAT FOR CROSS CREEK SUBDIVISION (File # 7.25..2, 2C) (2002-03-25/R-16b)

BE IT RESOLVED by the Council of the Town of Chapel Hill that it finds that the Cross Creek Subdivision, proposed by Design Response, on the property identified as Chapel Hill Township Tax Map 25, Lots 2 and 2C, if developed according to the preliminary site plan dated December 5, 2000, revised October 11, 2001, and the conditions listed below, would comply with the provisions of the Development Ordinance:

1. Resolution A: That all stipulations in Resolution A shall apply to the proposed development, unless modified or superseded by those stipulations below.
2. Removal of White Oak for Construction of Subdivision Road: That the white oak tree be removed for the construction of the subdivision road.
3. Weaver Dairy Road: That the applicant provide a payment-in-lieu for Weaver Dairy Road improvements. These Weaver Dairy Road improvements shall be in accordance with one-half of the 89-foot approved cross-section. The applicant shall provide a conceptual design and a cost estimate for a determination of the amount of payment prior to the issuance of a Zoning Compliance Permit. The payment shall be made prior to approval of the final plat.
4. Stormwater Management Plan: That prior to the issuance of a Zoning Compliance Permit the applicant submit a Stormwater Management Plan for review and approval by the Town Manager. The plan shall be based on the 1-year and 50-year frequency, 24-hour duration storms, where the post-development stormwater run-off rate shall not exceed the pre-development rate. Engineered stormwater facilities shall also remove 85% total suspended solids and treat the first inch of precipitation utilizing NC Division of Water Quality design standards. All stormwater management improvements outside public right-of-way must be located within storm drainage way easements and shall not be permitted within approved bufferyard areas.

NOW, THEREFORE, BE IT RESOLVED by the Council of the Town of Chapel Hill that the Council hereby approves the application for a Preliminary Plat for the Cross Creek Subdivision.

This the 25th day of March, 2002.

**RESOLUTION C**

(Transportation Board Recommendation)

A RESOLUTION APPROVING AN APPLICATION FOR A PRELIMINARY PLAT FOR CROSS CREEK SUBDIVISION (File # 7.25..2, 2C) (2002-03-25/R-16c)

BE IT RESOLVED by the Council of the Town of Chapel Hill that it finds that the Cross Creek Subdivision, proposed by Design Response, on the property identified as Chapel Hill Township Tax Map 25, Lots 2 and 2C, if developed according to the preliminary site plan dated December 5, 2000, revised October 11, 2001, and the conditions listed below, would comply with the provisions of the Development Ordinance:

1. Resolution A: That all stipulations in Resolution A shall apply to the proposed development, unless modified or superseded by those stipulations below.
2. Local Subdivision Road: That the subdivision road be constructed with two 10-foot travel lanes rather than two 11-foot travel lanes.
3. Subdivision Sidewalks: That 5-foot sidewalks be provided on both sides of the subdivision road.
4. Neighborhood Park: That the developer be required to provide a small neighborhood park rather than payment-in-lieu for recreation improvements, to be owned and maintained by the Homeowners' Association.
5. Weaver Dairy Road: That the applicant provide a payment-in-lieu for Weaver Dairy Road improvements. These Weaver Dairy Road improvements shall be in accordance with one-half of the 89-foot approved cross-section. The applicant shall provide a conceptual design and a cost estimate for a determination of the amount of payment prior to the issuance of a Zoning Compliance Permit. The payment shall be made prior to approval of the final plat.
6. Stormwater Management Plan: That prior to the issuance of a Zoning Compliance Permit the applicant submit a Stormwater Management Plan for review and approval by the Town Manager. The plan shall be based on the 1-year and 50-year frequency, 24-hour duration storms, where the post-development stormwater run-off rate shall not exceed the pre-development rate. Engineered stormwater facilities shall also remove 85% total suspended solids and treat the first inch of precipitation utilizing NC Division of Water Quality design standards. All stormwater management improvements outside public right-of-way must be located within storm drainage way easements and shall not be permitted within approved bufferyard areas.

NOW, THEREFORE, BE IT RESOLVED by the Council of the Town of Chapel Hill that the Council hereby approves the application for a Preliminary Plat for the Cross Creek Subdivision in accordance with the plans and conditions listed above.

This the 25th day of March, 2002.

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RESOLUTION D
(Bicycle and Pedestrian Advisory Board Recommendation)

A RESOLUTION APPROVING AN APPLICATION FOR A PRELIMINARY PLAT FOR CROSS CREEK SUBDIVISION (File # 7.25..2, 2C) (2002-03-25/R-16d)

BE IT RESOLVED by the Council of the Town of Chapel Hill that it fails to finds that the Cross Creek Subdivision, proposed by Design Response, on the property identified as Chapel Hill Township Tax Map 25, Lots 2 and 2C, if developed according to the preliminary site plan dated December 5, 2000, revised October 11, 2001, and the conditions listed below, would comply with the provisions of the Development Ordinance:

1. Resolution A: That all stipulations in Resolution A shall apply to the proposed development, unless modified or superseded by those stipulations below.
2. Weaver Dairy Road: That the applicant provide a payment-in-lieu for Weaver Dairy Road improvements. These Weaver Dairy Road improvements shall be in accordance with one-half of the 89-foot approved cross-section. The applicant shall provide a conceptual design and a cost estimate for a determination of the amount of payment prior to the issuance of a Zoning Compliance Permit. The payment shall be made prior to approval of the final plat.
3. Stormwater Management Plan: That prior to the issuance of a Zoning Compliance Permit the applicant submit a Stormwater Management Plan for review and approval by the Town Manager. The plan shall be based on the 1-year and 50-year frequency, 24- hour duration storms, where the post-development stormwater run-off rate shall not exceed the pre-development rate. Engineered stormwater facilities shall also remove 85% total suspended solids and treat the first inch of precipitation utilizing NC Division of Water Quality design standards. All stormwater management improvements outside public right-of-way must be located within storm drainage way easements and shall not be permitted within approved bufferyard areas.

NOW, THEREFORE, BE IT RESOLVED by the Council of the Town of Chapel Hill that the Council hereby approves the application for a Preliminary Plat for the Cross Creek Subdivision in accordance with the plans and conditions listed above.

This the 25th day of March, 2002.

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RESOLUTION E
Denying the Application

**A RESOLUTION DENYING AN APPLICATION FOR A PRELIMINARY PLAT FOR
CROSS CREEK SUBDIVISION (2002-03-25/R-16e)**

BE IT RESOLVED by the Council of the Town of Chapel Hill that it fails to finds that the Cross Creek Subdivision, proposed by Design Response, on the property identified as Chapel Hill Township Tax Map 25, Lots 2 and 2C, if developed according to the preliminary site plan dated December 5, 2000, revised October 11, 2001, and the conditions listed below, would comply with the provisions of the Development Ordinance:

(INSERT REASONS FOR DENIAL)

NOW, THEREFORE, BE IT RESOLVED that the Council of the Town of Chapel Hill that the Council hereby denies the application for a Preliminary Plat for the Cross Creek Subdivision in accordance with the plans and conditions listed above.

This the 25th day of March, 2002.

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RESOLUTION F
Planning Board's Secondary Recommendation

**A RESOLUTION REGARDING STORMWATER ISSUES IN THE CEDAR HILLS
DRIVE AREA (2002-03-25/R-16f)**

WHEREAS, the Council of the Town of Chapel Hill has received a recommendation from the Town Planning Board regarding storm drainage issues along Cedar Hills Drive, downstream from the proposed Cross Creek Subdivision; and

WHEREAS, the Council has been made aware of drainage concerns in this area, particularly as they relate to the size of the culvert under Cedar Hills Drive near Silo Drive.

NOW, THEREFORE, BE IT RESOLVED by the Council of the Town of Chapel Hill that the Town Manager is directed to investigate the concerns and prepare a report to the Council.

This the 25th day of March, 2002.

~~57~~**ATTACHMENT 1****CROSS CREEK SUBDIVISION****Questions/Issues Raised at the February 18, 2002 Public Hearing**

Questions were raised at the Public Hearing on February 18, 2002 concerning the area map and stubout signage. Below is a response to these questions from the Public Hearing.

Area Map

1. An issue concerning the Area Map was raised by a Council member at the February 18th Public Hearing. That issue concerned consistent area maps.

Comment: The Town has standardized area maps by using the mapping information provided by the Geographic Information Systems. We typically provide a standardized area map with the development applications. The area map for this application was inadvertently omitted from the Public Hearing memo. An area map is provided as an attachment to this memorandum.

Stubout Signage

2. A Council member asked that a stipulation be added to Resolution A to add a sign at the end of the subdivision road indicating that it may be extended in the future.

Comment: We have added the following language to Resolution A:

Street Stubout Signage: That a sign, approved by the Town Manager, reading "Roadway subject to future extension" shall be posted at each roadway stubout.

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Memo

Sass Development Company's response to the Town of Chapel Hill's Feb. 18th Public Hearing and the Town manager's RESOLUTION A:

Sass Development Company (SDC) accepts *stipulations 1 and 2* regarding the expiration of the preliminary plat and the floor area restrictions for lots 16, 17 and lot 2. Although the current ordinance would be met by providing the three floor area restricted lots we have decided to voluntarily make a contribution to the pool of truly affordable houses by sponsoring 100 percent of a Habitat for Humanity house if the Cross Creek subdivision obtains council approval. Susan Levy, the executive director of Habitat for Humanity in Orange County has been informed of this and has gladly accepted the pledge. She will search for a suitable lot within the Chapel Hill city limits.

SDC agrees with the town manager that the town standard road with two 11-foot travel lanes and 30 - inch curb and gutter and a five foot wide sidewalk on one side of the street would be appropriate - *stipulation 3*. If the town would prefer to reduce the width of the traveling lanes down to 10 feet that would also be an acceptable alternative. The other alternative cross-sections with drainage ditches rather than curb and gutter would not allow the use of the proposed oversized storm water pipes and restricted outlets which we consider to be necessary components of our proposed storm water management system.

SDC accepts the payment - in - lieu for the Weaver Dairy Road improvements as well as the 15 ft. right-of-way dedication along this road - *stipulations 4 and 5*.

SDC has hired Frank McKeever with Bartlett Tree Experts who has reported back to us that the 31 inch white oak appears to be healthy and can be expected to live many more years. Therefore we would like to preserve this tree if we would be allowed to split the road around the tree. If the tree is to be preserved, Frank McKeever recommends to install a drip irrigation system as well as a lightning protection device, suggestions which we will follow. - *stipulation 6*.

SDC accepts the payment in lieu for the recreation requirements - *stipulation 7*.

SDC continues to prefer the 20 -foot pedestrian easements for the connector between Cross Creek and the Cedar Hills subdivision to either not be required at all or for this unimproved easement to be on the two lots north and south of the proposed location. However we will accept the condition in the managers resolution if passed by council - *stipulation 8*.

SDC acknowledges and accepts *stipulations 9 through 22*.

SDC believes that Cross Creek currently contributes minimally to the downstream flooding conditions within the Cedar Hills subdivision and that the proposed voluntary

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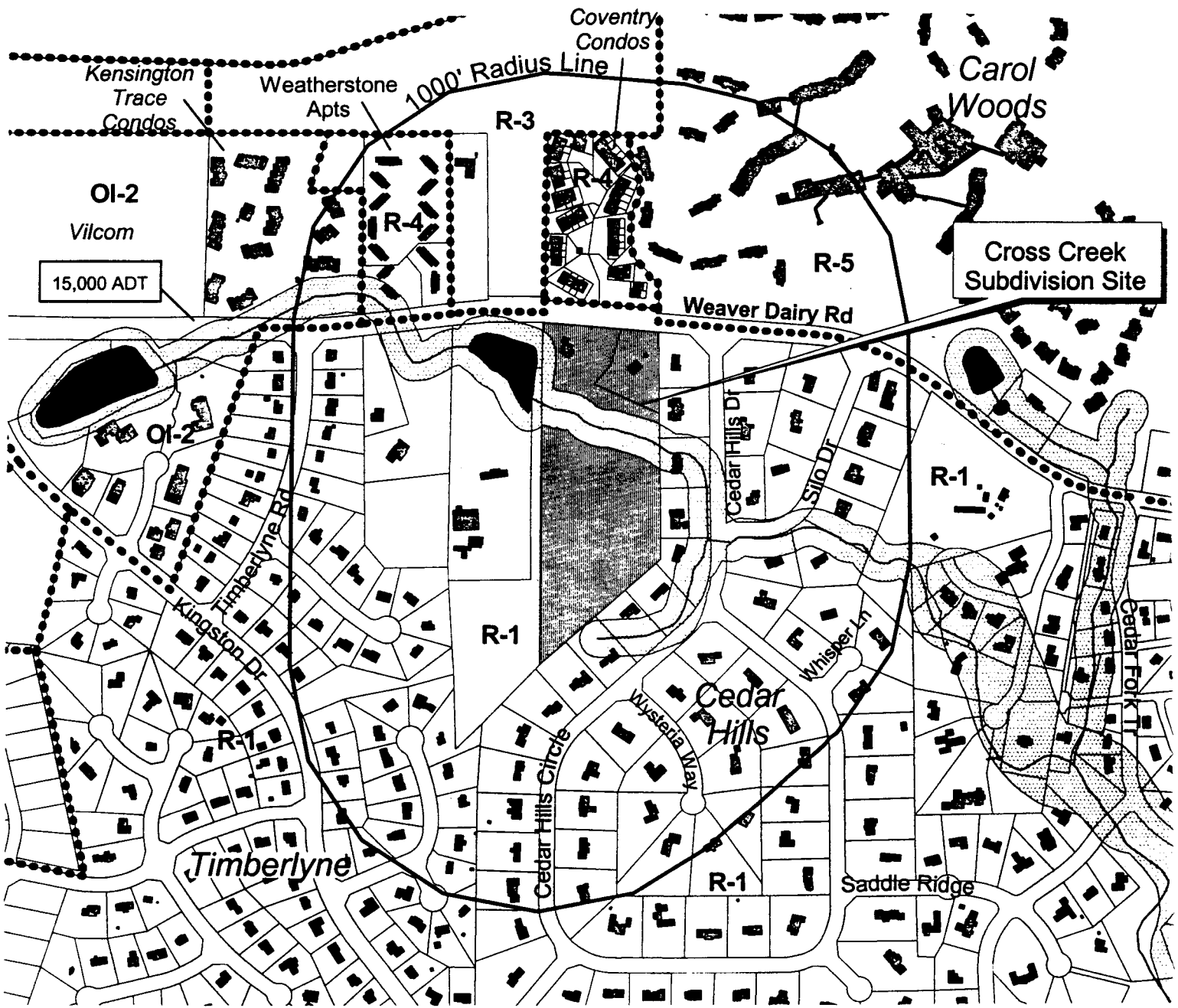
storm water management devices such as the oversized storm water pipes and the level spreaders, will adequately compensate for the creation of impervious surfaces. We have retained Amos Clark's services (The John R McAdams Company) to calculate and demonstrate this. We will make his computations available to you prior to the March 25th Town Council meeting and hope that the methodology applied by this engineer will satisfy the town - *stipulations 23 and 25.*






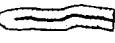
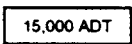
SDC accepts the 30 - foot drainage easement along the resource conservation district as well as the pre-cast storm water drainage curb hood/covers - *stipulation 26.*

SDC accepts all remaining stipulations, 27 through 39.

Ray Lee

57 Area Map
 Cross Creek Subdivision
 Preliminary Plat Approval Application



	Site of Cross Creek Subdivision	 N  200 0 200 400 Feet
	Buildings	
	Chapel Hill Zoning	
	Streams/Ponds with RCD/Floodplain	
	Average Daily Traffic Count (ADT) 1999 Data	

GIS Map prepared by
Chapel Hill Planning

Public Hearing
March 25, 2002

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MEMORANDUM

TO: Mayor and Town Council

FROM: W. Calvin Horton, Town Manager

SUBJECT: Public Hearing: Cross Creek Subdivision - Application for Preliminary Plat Approval (File No. 25.2 and 2C)

DATE: February 18, 2002

INTRODUCTION

We have received a request for Preliminary Plat approval of the Cross Creek Subdivision located on the south side of Weaver Dairy Road between Timberlyne Drive and Cedar Hills Drive approximately one mile east of Airport Road. The 12.78-acre site is immediately west and north of the Cedar Hills neighborhood and east of the Kitchen property (AKA Britt Farm). The applicant is proposing to develop 17 residential lots. Proposed access is from Weaver Dairy Road.

The proposal involves two parcels owned by Charles C. and Linda Pulliam. Two houses exist on the site and are proposed to be incorporated into the subdivision. The site is located in the Residential (R-1) zoning district. Portions of the site are located in two areas of Resource Conservation District comprising 3.2-acres. Tonight's Public Hearing has been scheduled to receive evidence in support of and in opposition to approval of the application.

This package of materials has been prepared for the Town Council's consideration, and is organized as follows:

- **Cover Memorandum:** Introduces application, describes process for review, summarizes staff and advisory board comments, and offers recommendations for Council action.
- **Staff Report:** Offers detailed description of site and proposed development.
- **Attachments:** Includes a checklist of requirements for this development, resolutions of approval and denial, advisory board comments, and applicant's materials.

BACKGROUND

Preliminary Plat approval authorizes the division of land. Assuming approval of the Preliminary Plat, we expect the lots in this subdivision to be used for construction of single-family homes. However, we note that two-family dwellings, places of worship, child day care facilities, and non-profit recreation facilities are permitted uses on lots in the Residential-1 zoning district.

PROCESS

This is an application for a Preliminary Plat approval. The Development Ordinance requires the Town Manager to conduct an evaluation of a Preliminary Plat application, to present a report to the Planning Board, and to present a report and recommendation to the Town Council. We have reviewed the application and evaluated it against Town standards; we have presented a report to the Planning Board; and tonight we submit our report and preliminary recommendation to the Council.

We note that review of subdivision proposals differs from review of Special Use Permits in that the question of compliance with regulations and standards is the basis for approval or denial, rather than the four findings of fact listed in Article 18 of the Development Ordinance. However, the Council's review and action on a subdivision is quasi-judicial, with sworn testimony and evidence entered into the record. Please see the attached summary of key differences between legislative and quasi-judicial zoning decisions, prepared by Mr. David Owens of the Institute of Government.

The standard of review and approval of a Preliminary Plat application involves comparing the application with the regulations and standards in the Development Ordinance. The review typically focuses on vehicular and pedestrian access and circulation, traffic impact, public improvements, lot standards, and recreation area.

Information regarding this application will be presented at tonight's Public Hearing. The Development Ordinance directs that if, after consideration of the information, the Council decides that the application meets all the Development Ordinance requirements, the application must be approved. If the Council decides that the application does not meet all the Development Ordinance requirements, the application accordingly must be denied.

DESCRIPTION OF THE APPLICATION

The application is for a preliminary plat to subdivide 12.78 acres into a residential subdivision. The applicant is proposing to develop 17 lots. Currently, two houses exist on two separate tracts owned by Charles C. and Linda Pulliam. Tract 1 is 2.2 acres and contains a single family dwelling. Tract 2 is 10.73-acres and also contains a single-family home. Both of these homes are proposed to be incorporated within the proposed subdivision and are proposed to have access to the new subdivision road. Currently, the two homes share a joint driveway off of Weaver Dairy Road. In accordance with the restrictions in Section 13.11 of the Development Ordinance ("Major Subdivision and Planned Development-Housing Floor Area Restrictions") house size limits are proposed for 3 of the lots. One of the three restricted size homes is proposed to be the existing dwelling on Tract 1.

A total of .91 acres of recreation area is required for this subdivision. The applicant is proposing to comply with the minimum recreation requirements by providing a payment-in-lieu of dedicating land.

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A portion of the site is located in two separate areas of Resource Conservation District. The Resource Conservation District width for this site is 75 feet. The source of Cedar Fork Creek is east of Timberlyne Shopping Center. The site is in Orange County and is identified as Chapel Hill Township Tax Map 25, Lots 2 and 2C.

EVALUATION OF THE APPLICATION

Evaluation of this application centers on compliance with the subdivision regulations and standards in the Development Ordinance. We have included as an Attachment of this memorandum a checklist of the Town's subdivision regulations. The checklist indicates which of the Town's regulations are satisfied by the applicant's proposal and recommended conditions.

The Council may find that the proposal meets the subdivision regulations and other pertinent Town regulations, or may find that the proposal does not meet the regulations. Please refer to the attached Staff Report for detail on compliance with subdivision regulations.

KEY ISSUES

Based on our staff evaluation and comments received from Advisory Boards, we believe that the seven key issues concerning this proposed development are:

- Weaver Dairy Road improvements;
- Proposed subdivision road design;
- Location of the pedestrian easement;
- Deconstruction/reconstruction of the existing house for compliance for size-restricted housing;
- Location of the drainage easement;
- Stormwater management; and
- Planning Board's secondary recommendation

1. Weaver Dairy Road Improvements: On January 28, 2002, the Council voted to request that:

1. That the NCDOT immediately suspend all planning, including engineering planning, for the widening of Weaver Dairy Road; and
2. Ask that any funds allocated by NCDOT not be allocated away from Chapel Hill until the Town communicates the result of its reconsideration of this issue; and
3. That the planning remain suspended until such time as the Chapel Hill Town Council reconsiders its earlier decision, and formally communicates the results of its reconsideration to the NCDOT.

A staff evaluation of the Cross Creek Subdivision proposal was conducted by staff and prepared for advisory board review prior to this January 14 action. Our January Planning Staff Report, that was transmitted to advisory boards, indicated that the applicant is proposing to dedicate an additional 15 feet of right-of-way along the project's 460 feet of Weaver Dairy Road frontage and provide a payment-in-lieu for improvements to this

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Weaver Dairy Road frontage. The payment-in-lieu, as proposed, was to be based on one-half of the four-lane, median divided cross-section, to include a planted median of 15.5 feet, an eleven foot travel lane, an outside lane widened to include bicycle passage at 14 feet, 30-inch curb and gutter, and a 10-foot area to include a sidewalk and landscape strips on each side of the sidewalk. The January 8 Staff Report recommended approval of the right-of-way dedication and proposed payment-in-lieu for road improvements.

Comment: The Manager's preliminary recommendation, Resolution A, reflects the January 14 Council action. We recommend that the applicant dedicate an additional 15 feet of right-of-way on the Weaver Dairy Road frontage and provide a payment-in-lieu for curb and gutter and for sidewalk with no payment for road widening because the ultimate cross-section of the roadway continues to be discussed. Resolution A includes this recommendation.

2. Subdivision Road Design: The applicant's proposed subdivision road does not contain the Town standard cross-section for a subdivision street. At issue is the curb and gutter dimension. The Town's standard for curb and gutter is 30-inches and the applicant is proposing a 24-inch curb and gutter. Other street standards have been met with the applicant's proposal including a 50-foot right-of-way, a 22-foot pavement section, and a 5-foot sidewalk.

At the January 15, 2002 Transportation Board meeting, the Board proposed the subdivision street be constructed with two 10' travel lanes in order to reduce the amount of impervious surface. The Board also recommended that the subdivision road have 5' sidewalks on both sides of the street. The applicant proposes to have sidewalks on one side.

Comment: We do not recommend the cross-section proposed by the Transportation Board. We recommend the Town standard with two 11-foot travel lanes and 30-inch curb and gutter. With 17 lots proposed, we believe the 11-foot travel lanes proposed by the applicant are appropriate. We recommend the 30-inch curb and gutter for better control of stormwater as well as improved long term maintenance. The additional 6 inches is added to the gutter width increasing the carrying capacity for accumulated storm water in the gutter. The increased width also provides for a larger area for vehicle tires when circumstances arise that require vehicles to get close to the curb. Cracking of the concrete gutter is also a problem with a width less than 30 inches.

We recommend that either the Town standard cross-section or the recommended alternative cross-section be selected for the subdivision road design. The alternative cross-section is described as follows:

- a 30-foot right-of-way
- a 22-foot pavement section
- 5-foot sidewalk adjoining the street on one side
- a 3-foot shoulder and
- swales in a drainage easement outside the right-of-way.

The Town standard subdivision road is typical in new subdivisions in Chapel Hill. The recommended alternative cross-section provides a response to issues raised concerning impervious surface and stormwater runoff as they affect downstream drainage concerns. Swales allow for stormwater runoff to be slowly absorbed into the ground close to its source rather than collected by gutters and inlets to pipes and released at a farther destination contributing to runoff farther away from the source. Resolution A, the Manager's preliminary recommendation, would allow either the Town standard cross-section or the recommended alternative cross-section. Furthermore, we note that an additional condition requires a shifting of the street alignment, so that a 31-inch oak tree located centrally on the site be preserved.

3. Location of Pedestrian Easement: A platted pedestrian easement exists abutting the eastern property line of the proposed Cross Creek Subdivision. The easement was located at its current location when Orange County had planning jurisdiction over this area. Such pedestrian easements are typical of others recorded during this same time period in order to ensure the connectivity of existing neighborhoods to future parcels remaining undeveloped. The existing pedestrian easement is located on terrain that is hilly and wet. No improvements have been made in the existing easement.

Comment: We believe that though the location is not in desirable terrain for a pedestrian easement, techniques for designing pedestrian connections that are safe and environmentally sound are available and could be applied to this location. We believe that it is important to retain these opportunities for links between neighborhoods, neighborhood amenities, schools, and other pedestrian connectors. We do not recommend any improvements to the existing easement at this time.

We recommend that a 20-foot, unimproved pedestrian connection be incorporated into the proposed subdivision design. This unimproved pedestrian corridor would connect to the existing pedestrian easement in the Cedar Hills neighborhood. The recommended pedestrian easement is to be owned and maintained by the Homeowners' Association. Resolution A includes the requirement.

4. Deconstruction/Reconstruction of Existing House for Compliance with Restricted House Size: We note that the use of an existing house to meet the Development Ordinance requirements for a restricted house size lot (Article 13.11) is a new approach to complying with the ordinance. The existing house on Lot 16 is proposed to meet the ordinance by deconstructing existing floor area to limit overall floor area to 1,350 square feet. The applicant has proposed a method for down-sizing the existing dwelling. Currently, there appears to be approximately 2,127 square feet of floor area, on two floors. On the first floor approximately 1,287 square feet of floor area exists and on the second floor approximately 840 square feet of floor area. The applicant proposes to:
 1. Deconstruct the existing stairway to the second floor and replace it with a pull-down ladder; remove all plumbing fixtures from the second floor; and cap the water pipe leading to the second floor; and,
 2. Enclose a portion of the side porch adjacent to the sunroom to bring the total square footage of the first floor to 1,350 square feet of floor area.

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The Development Ordinance requires that the size limitation must remain in effect for one year following issuance of the initial Certificate of Occupancy for each structure.

Comment: We believe that this approach meets the ordinance requirement for restricted house size on the proposed Lot 16. Resolution A, the Manager's preliminary recommendation, would authorize the proposed deconstruction of the existing house.

5. Location of the Drainage Easement: The drainage easement located along the eastern top of the Resource Conservation District buffer, is shown on the plans as being 30 feet in width overall, with 20 feet outside the Resource Conservation District and 10 feet inside the Resource Conservation District. The drainage easement is proposed to contain constructed stormwater facilities, vegetated swales and level spreaders.

Comment: The Development Ordinance requires that land disturbance proposed in the Resource Conservation District shall be kept minimal. We believe that for maintenance of the proposed stormwater structures, 10 feet must be available for equipment to clean, regrade, and perform regular maintenance of these structures to ensure effective functioning. We recommend that the drainage easement be located entirely outside the Resource Conservation District in order for the Resource Conservation District to remain undisturbed. Resolution A includes a stipulation to this effect.

6. Stormwater Management: Throughout the review of this subdivision proposal, downstream stormwater impact has been a key issue. Downstream properties experience flooding.

Comment: Stormwater management is an issue reviewed at several stages during the development review process. Initially, a stormwater impact analysis is required as a Preliminary Plat submittal requirement. The applicant's original stormwater impact analysis was inadequate. During our initial staff review, we requested additional information about the adequacy of the existing waterways to handle the stormwater flows. The applicant responded with additional information. In response, the developer has provided the following information in a follow-up letter to staff dated October 16, 2001:

We believe that the portion of the drainage channel immediately downstream of this property is a manmade drainageway constructed at the time of the initial development of Cedar Hills Subdivision. On the Alster series topographic maps, commissioned by UNC in 1974, the natural drainageway can be clearly seen crossing the now existing lot downstream of the project in a diagonal manner. An already flat slope for this stream therefore became even flatter when a ditch for the stream was constructed along the north and east edges of that lot, as exists today. The Town of Chapel Hill recently participated in upsizing the drainage pipes beneath the downstream owner's driveway, but the remaining constriction of flow, if any, might well be the pipe beneath Cedar Hills Drive, where Cedar Fork Creek meets an unnamed tributary and then proceeds on the south side of Silo Drive. Our observation is that the drainage pipe beneath Cedar Hills Drive has a circular cross-section and may not be providing sufficient cross-sectional area until the backwater off that pipe reaches a critical depth.

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The design response of the applicant, given the belief that the problems identified downstream are related to existing construction in the natural floodplain of Cedar Fork Creek, has been to institute stormwater detention and stormwater quality measures into the subdivision design, even though not required to do so under the existing Development Ordinance. We believe, as outlined in separate materials included with the resubmittal, that we have at least, by minimizing the onsite impervious surface, by utilizing oversized stormwater pipes and restricted outlets, and by providing vegetated swales and level spreaders outside the RCD, made the drainage situation downstream no worse than it is today. We also believe that it is not the burden of this applicant to provide the solution for mistakes made by regulatory jurisdictions in the past." [Applicant's materials]

In the above statement the applicant provides information about the downstream conditions and proposes on-site stormwater facilities with a commitment to not make drainage situation downstream worse. Accordingly, we have included stipulations in the Manager's preliminary recommendation, Resolution A, that would require the proposed on-site drainage facilities and require that documentation be provided demonstrating that off-site conditions after development will be no worse than they are today. Our standard stipulation has been modified to read as follows:

Stormwater Management Plan: That prior to the issuance of a Zoning Compliance Permit the applicant submit a Stormwater Management Plan for review and approval by the Town Manager. The plan shall demonstrate that the drainage situation downstream with the subdivision proposal is no worse than it is on the date of this adopted resolution, according to methodology approved by the Town Manager. The plan shall be based on the 1-year and 50-year frequency, 24-hour duration storms, where the post-development stormwater run-off rate shall not exceed the pre-development rate. Engineered stormwater facilities shall also remove 85% total suspended solids and treat the first inch of precipitation utilizing NC Division of Water Quality design standards. All stormwater management improvements outside public right-of-way must be located within storm drainageway easements and shall not be permitted within approved bufferyard areas.

7. Planning Board Secondary Recommendation: The Planning Board has recommended that the Council ask the Town Manager to arrange for a study of the downstream stormwater management issues, particularly as they relate to the size of the culvert under Cedar Hills Drive. The study, as recommended, would not be tied to this subdivision proposal.

Comment: We have included a resolution representing the Planning Board's secondary recommendation. If the Town Council adopts the resolution, we will add this to the list of items requiring study and conduct further study of the downstream situation as time permits.

The attached Resolution F, if adopted, would ask the Town Manager to arrange for such a study.

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SUMMARY OF COMMENTS

We have attached a resolution that includes standard conditions of approval as well as special conditions that we recommend for this application. The key special conditions that we recommend are described in detail in the accompanying staff report. With this application, we believe that the Council could recommend approval.

The Manager's recommendation incorporates input from all Town departments involved in review of the application.

SUBSEQUENT REGULATORY STEPS

Following is a brief outline describing the next steps in the development review process, should the Council approve the Preliminary Plat application:

1. Applicant receives the clerk-certified copy of the Council-adopted resolution;
2. Applicant submits detailed Final Plans and documentation, complying with Council stipulations. Information is reviewed by Town departments and the following agencies:
 - Orange Water and Sewer Authority,
 - Duke Power company,
 - Public Service Company, and
 - BellSouth.
3. Upon demonstration of compliance with remaining Council stipulations, Town staff issues a Zoning Compliance Permit authorizing site work. Permit includes conditions specific to the development and requires pre-construction conferences with Town staff;
4. Engineering Department issues an Engineering Construction Permit, authorizing work within the public right-of-way;
5. Applicant submits final plat application for Town review and approval. Once approved, the plat is recorded; and
6. Inspections Department issues Building Permits for development on individual lots and Certificates of Occupancy.

RECOMMENDATIONS

Recommendations are summarized below. Please see summaries of board actions and recommendations in the attachments.

Planning Board's Recommendation: The Planning Board reviewed this proposal on January 8, 2002 and voted 6-1 to recommend that the Council approve the application with the following conditions. Please see the attached Summary of Planning Board Action.

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Resolution B includes the following recommended conditions of the Planning Board.

- **Board Recommendation:** That stipulation #6 requiring an alternative road design in order to preserve the 31" white oak be deleted. The applicant and Planning Board both felt that the road in this portion of the site was proposed in the best location following the contours across the property. The applicant stated that he had looked at several different designs for the road.

Comment: We have included the stipulation requiring preservation of the 31-inch oak in the Manager's preliminary recommendation, Resolution A. It is a specimen deciduous tree in moderate condition. It is also the only deciduous tree on the property of such proportion. The subdivision road realignment would change the configuration of several lots on the southern portion of the site. Resolution A requires the retention of the white oak tree and that the applicant include tree protection fencing around the critical root zone of the tree as a part of a Landscape Protection Plan.

- **Board Recommendation:** That the pedestrian connection be a twenty-foot, unimproved easement deeded to the Homeowners' Association.

Comment: We have included this stipulation in the Manager's preliminary recommendation, Stipulation # 8.

- **Board Recommendation:** That the stipulation requiring a Type "B" buffer along the western property line be deleted.

Comment: We have deleted this buffer requirement stipulation. It was made in error. No buffer is required between a major subdivision and vacant land or land used for a single dwelling.

- **Board Recommendation:** That the width of the drainage easement be 30 feet in a drainage easement deeded to the Homeowners' Association outside the Resource Conservation District.

Comment: We have included this stipulation in the Manager's preliminary recommendation: The 30-foot drainage easement along the eastern top of the Resource Conservation District must have its full 30 foot width entirely out of the Resource Conservation District. It is anticipated that routine maintenance will require 10 feet around the constructed stormwater drainage structures. Given the area required for maintenance and to minimize land disturbance in the Resource Conservation District, the storm drainage easement should be located entirely outside the Resource Conservation District.

- **Board Recommendation:** That stipulation #27 describing construction vehicle traffic in the Construction Management Plan provide for an exception. The Plan states that no construction vehicles serving the site use streets in the Cedar Hills Subdivision. A sewer line extension from a sewer line located on Cedar Hills Drive is proposed to be accessed from the eastern property line.

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Comment: We have included this exception to the Construction Management Plan (stipulation #27) in the Manager's preliminary recommendation, Resolution A.

Transportation Board Recommendation: The Board reviewed this application on January 15, 2002 and voted 4 – 3 to recommend that Council adopt Resolution C. Resolution C differs from the Manager's preliminary recommendation, on the following issues:

- **Board Recommendation:** That the proposed local street be constructed with two 10' travel lanes.

Comment: We believe that The Transportation Board's recommendation for reduced width of travelway pavement from the recommended 11 feet to 10 feet reduces impervious surface but at the same time may impact maneuverability of normal subdivision traffic as well as service vehicle access to the subdivision. When there is on-street parking, the problem of clearance would be compounded. We have not included this stipulation in the Manager's preliminary recommendation.

- **Board Recommendation:** The Board recommended that 5-foot sidewalks be constructed on both sides of the subdivision road.

Comment: We have not included this recommendation in Resolution A, the Manager's preliminary recommendation. We believe that a single sidewalk is sufficient to serve this subdivision and the increase in impervious surface is not recommended.

- **Board Recommendation:** The Board recommended that the developer be required to provide a small neighborhood park rather than payment-in-lieu for recreation improvements.

Comment: We have not included this recommendation in Resolution A. We believe that a small park would not be justified. We believe that the community park, Cedar Falls Park, located within a mile of the subdivision, is better equipped to provide all ages with a wide variety of recreational opportunities.

Chapel Hill Parks and Recreation Commission: The Chapel Hill Parks and Recreation Commission met on January 18, 2002 to review this development proposal. They voted 8 – 0 to recommend that the Council approve the plan for the Cross Creek Subdivision with the following stipulation:

- That the developer provide a payment-in-lieu of providing recreation area. The Commission recommends that payment-in-lieu proceeds be used at Cedar Falls Park and/or the Dry Creek Greenway.

Comment: We have included this recommendation in Resolutions A, B, and D. The stipulation requires a payment-in-lieu for a minimum of .91 acres of recreation area for this development. We have included the Chapel Hill Parks and Recreation Commission's recommendation that the proceeds be used at Cedar Falls Park and/or Dry Creek Greenway.

Bicycle and Pedestrian's Advisory Board Recommendation: The Bicycle and Pedestrian Advisory Board reviewed this subdivision application on January 22, 2002 and voted unanimously (6-0) to recommend that the Council approve the application with the adoption of Resolution D. The Board supported the pedestrian connection requiring an unimproved, 20-foot wide easement deeded to the Homeowners' Association. Please see the attached Summary of Bicycle and Pedestrian Advisory Board Action.

Manager's Preliminary Recommendation: Our preliminary recommendation is that the Council approve the Preliminary Plat application with the conditions listed in Resolution A.

Resolution B would approve the application as recommended by the Planning Board.

Resolution C would approve the application as recommended by the Transportation Board.

Resolution D would approve the application as recommended by the Bicycle and Pedestrian Advisory Board.

Resolution E would recommend that the Council deny the application.

Resolution F provides the secondary recommendation of the Planning Board regarding Town study of the Cedar Hills Drive drainage situation.

(A)
**Cross Creek Subdivision
 Preliminary Plat**

DIFFERENCES AMONG RESOLUTIONS

ISSUE	Resolution A Manager's Preliminary Recommendation	Resolution B Planning Board's Recommendation	Resolution C Transportation Board's Recommendation	Resolution D Bicycle and Pedestrian Advisory Board Recommendation
Weaver Dairy Road Improvements	Payment-in-lieu of curb&gutter and sidewalk	Payment-in-lieu of ½ of a 4-lane median divided cross-section	Payment-in-lieu of ½ of a 4-lane median divided cross-section	Payment-in-lieu of ½ of a 4-lane median divided cross-section
Redesign subdivision road to preserve oak tree	Yes	No	*	Yes
Pedestrian easement 20' & unimproved	Yes	Yes	*	Yes
Type "B" buffer requirement removed	Yes	Yes	*	*
Drainage Easement outside the RCD	Yes	Yes	*	*
Construction Management Plan to allow sewer extension	Yes	Yes	*	*
Subdivision street (2) 11' travel lanes	Yes	Yes	No (10' lanes)	Yes
5-foot sidewalks on one side of subdivision street	Yes	Yes	No (both sides)	Yes
Developer provide payment-in-lieu for recreation area	Yes	Yes	No (park)	Yes
Expanded Stormwater Management Stipulation	Yes	*	*	*

* Issue was not discussed at this particular meeting and is therefore not included in this Resolution

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ATTACHMENTS

1. Staff Report (p. 14).
2. Checklist of Compliance with Subdivision Regulations (p. 25).
3. Resolution A (p. 26).
4. Resolution B (p. 33).
5. Resolution C (p. 34).
6. Resolution D (p. 35).
7. Resolution E (p. 36).
8. Resolution F (p. 37).
9. Summary of Planning Board Action (p. 38).
10. Summary of Transportation Board Action (p. 39).
11. Summary of Parks and Recreation Commission Action (p. 40).
12. Summary of Bicycle and Pedestrian Advisory Board Action (p. 41).
13. Summary of Key Differences Between Legislative and Quasi-Judicial Zoning Decisions (p. 42).
14. Subdivision Fact Sheet (p. 43).
15. Applicant Materials (p. 45)
16. Reduced Plans (p. 47)
17. Letters from Citizens (p. 51).

STAFF REPORT

SUBJECT: Public Hearing: Cross Creek Subdivision - Application for Preliminary Plat Approval (File No. 7.25..2, 2C)

DATE: February 18, 2002

INTRODUCTION

We have received a request for Preliminary Plat approval of the Cross Creek Subdivision located off Weaver Dairy Road between Timberlyne Drive and Cedar Hills Drive, about one mile east of Airport Road. The 12.78-acre site is immediately north and west of the Cedar Hills neighborhood and east of the property known as Britt Farm. The applicant is proposing to develop 17 residential lots. Access to the site is from Weaver Dairy Road.

Two areas of Resource Conservation District exist on the site associated with Cedar Fork Creek. Approximately 3.2-acres are in the Cedar Fork Creek Resource Conservation District. The greatest area of Resource Conservation District traverses the middle of the site. A smaller area of Resource Conservation District occurs at the extreme southern tip of the site. The property is located in the Residential-1 (R-1) zoning district. The site is in Orange County and is identified as Chapel Hill Township Tax Map 25, Lots 2 and 2C.

Attached are the Subdivision Fact Sheet, citizen letters, letter from the developer, and reduced plans.

BACKGROUND

Preliminary Plat approval authorizes the division of land. Assuming approval of the Preliminary Plat, we expect the lots in this subdivision to be used for construction of single-family homes. However, we note that two-family dwellings (a dwelling unit with an accessory apartment), places of worship, child day care facilities, and non-profit recreation facilities are permitted uses on lots in the Residential-1 zoning district subject to some restrictions. In this case, the applicant's proposal is based on single-family dwelling use of these proposed lots.

EVALUATION

We have reviewed the application for compliance with the standards of the Development Ordinance and offer the following evaluation:

EXISTING CONDITIONS

Location: This 12.78-acre site involves two lots both owned by Charles and Linda Pulliam. Tract 1 is 2.2-acres and contains a single-family dwelling. Tract 2 is 10.375-acres and also contains a single-family home. Both of these homes are proposed to be incorporated within the proposed

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subdivision and are proposed to have access to the new subdivision road rather than a driveway onto Weaver Dairy Road. Currently, the two homes share a joint driveway off of Weaver Dairy Road.

The site is located on the south side of Weaver Dairy Road and to the west and north of Cedar Hills Subdivision and to the east of the Kitchen property (AKA Britt Farm). The property is approximately one mile east of Airport Road between Timberlyne Drive, part of Timberlyne Subdivision and Cedar Hills Drive, part of Cedar Hills Subdivision. The site is crossed by Cedar Fork Creek and contains two associated Resource Conservation District areas. The creek is centered within a fifty foot drainage easement located in the middle of the site. An existing seventy-five foot wide area of Resource Conservation District extends on each side of the creek's banks.

Access: The northern portion of the site is accessible by vehicle from a gravel driveway at Weaver Dairy Road. The two existing houses on the site share this joint access. The southern half of the site is undeveloped and accessible on foot.

Topography, Drainage and Vegetative Cover: The topography varies from steeply sloping above the creek banks to areas of relative flatness. Generally, the land starting at Weaver Dairy Road is slightly sloped to the south and remains generally flat for the first third of the site. The land begins to descend to the drainage area of Cedar Fork Creek with greater steepness and then to flatten out at the creek margins. The land climbs again in the second third of the site. The highest point on the site is 520 feet above sea level and occurs adjacent to the old Britt Farm property along a ridge line dividing the property into two mini watersheds. The southern third of the site south of the ridge line drains to a tributary of Cedar Fork Creek. The steepest slopes on the site, greater than 25%, occur along the tributary margins at the southern most portion of the site. Both the tributary and Cedar Fork Creek flow southeast to Eastwood Lake and the greater drainage basin of Booker Creek. Upstream of the development is the Cedar Fork Creek watershed. There are no 100-year flood areas on the site.

The site is a vegetative mix of immature and mature pine trees, mixed with hardwoods. A 31" diameter at breast height (dbh) white oak and a 33" diameter at breast height pine tree are the largest trees inventoried on the site. Several other significant pine trees exist primarily in the Resource Conservation District.

Existing Structures: There are two existing houses on the site. Both are occupied single-family structures, with outbuildings. They are both to be included as part of the proposed subdivision.

We understand the applicant proposes to utilize one of the two existing homes as fulfillment for the Housing Floor Area Restrictions requirement for a major subdivision application.

Easements: An existing 30-foot OWASA easement cuts across the extreme southern tip of the property through the Resource Conservation District occurring there.

There are two easements that abut the edge of the site on the eastern side of the development: a 30-foot pedestrian easement between Lots 7 and 7A of the Cedar Hills Subdivision and a thirty-foot OWASA sanitary sewer easement between lots 5 and 7 of the same subdivision.

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Zoning: This property is located in the Residential -1 zoning district. Adjacent on both sides is Residential-1. Across Weaver Dairy Road is Coventry, a Residential-4 neighborhood. Carol Woods Retirement Center is located diagonally to the site and is zoned Residential- 5. Property zoned Residential-3 is also across the street.

Comprehensive Plan: The Chapel Hill Land Use Plan, a component of the Comprehensive Plan, identifies this site and adjacent properties to the east, west, and south as Low Residential (1-4 units per acre). The Land Use Category for properties to the north across the street on Weaver Dairy Road is both medium (4-8 units/acre) and high residential (8-15 units/acres).

ORDINANCE REQUIREMENTS

Housing Floor Area Restrictions: As a Major Subdivision application, this proposal is subject to Article 13.11 of the Chapel Hill Development Ordinance. Based on Section 13.11, this proposal is required to restrict the size of houses that may be constructed on 3 of the proposed residential lots. One of these lots must be restricted so that the house that is initially constructed does not exceed 1,100 square feet of floor area. Two lots must be restricted so that the houses initially built do not exceed 1,350 square feet of floor area. The submitted site plan identifies 3 lots on which a size-limited unit must be located: lots #2, #16, and #17.

The existing house on the west side of the property is proposed to be part of Lot 1 and the existing house on the east is to be Lot 16. Lot 17 is proposed to be a newly created lot between Weaver Dairy Road and the existing house. Lot 2 is proposed to contain a dwelling constructed of no more than 1,100 square feet of floor area. Both Lot 16 and 17 are planned to be size-restricted to 1,350 square feet each. The developer proposes to reduce the floor area of the existing house on Lot 16 in order to satisfy the limit of 1,350 square feet of floor area.

The applicant has proposed a method for down-sizing the existing dwelling on Lot 16. Currently, there appears to be approximately 2,127 square feet of floor area, on two floors. On the first floor is approximately 1,287 square feet of floor area and on the second floor approximately 840 square feet of floor area. The applicant proposes to:

1. Deconstruct the existing stairway to the second floor and replace it with a pull-down ladder; remove all plumbing fixtures from the second floor; and cap the water pipe leading to the second floor. And,
2. Enclose a portion of the side porch adjacent to the sunroom to bring the total square footage of the first floor to 1,350 square feet of floor area.

We recommend that the proposed deconstruction be completed prior to Town approval of the Final Subdivision Plat.

The size limitation must remain in effect for one year following issuance of the initial Certificate of Occupancy for each structure. We recommend that a stipulation of Resolutions A require that a note be placed on the final plans and plats indicating the specific lots and floor area restrictions

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for each lot on which size limitations are placed and that this restriction be included in restrictive covenants for the subdivision as well.

Steep Slopes: Subsection 14.4.2 (Site Design) of the Development Ordinance addresses proposed development and steep slopes. The provisions call for minimal grading and site disturbance as well as specialized site design techniques in areas of steep slopes. Several portions of this site contain land slopes of between 10 and 20 percent and some in excess of 25%. We recommend that any construction proposed in areas greater than 10% provide an explanation of how construction will address minimizing land disturbance on the steep slopes. We have included a stipulation to this effect in Resolution A.

Intensity Regulations: The proposed lots meet the Development Ordinance standards for Minimum Gross Land Area and Minimum Lot Width under requirements of Section 13.11.

DEVELOPMENT DESCRIPTION

This proposed development is for a 17-lot development on 12.78 acres. Vehicular access to the site is proposed from Weaver Dairy Road. The proposed development also includes a street stub-out to the Kitchen property on the west. A temporary turnaround easement is proposed to be constructed on Lot 7. It is believed that if the Kitchen Property is developed, a loop road could be designed to connect the two developments for better vehicular circulation.

As noted earlier, the applicant is proposing to limit the building footprint on 3 lots to satisfy the small house regulations of Section 13.11 of the Development Ordinance. Two of these size-restricted dwellings are proposed to be new construction and one is proposed to be a renovation of an existing home which will include a reduction in square footage. We note that all three of the size-restricted houses are clustered in the northern portion of the site at the entrance to the subdivision.

All homesites proposed for the development are outside the Resource Conservation District and the 100-year flood plain. The source of Cedar Fork Creek begins upstream of this development generally to the east of Airport Road and drains less than a mile. The drainage area includes the pond on the neighboring Britt Farm.

Recreation Requirements: The Development Ordinance requires that a certain percentage of subdivision land be set aside for recreation area for the residents. The minimum recreation area requirement in the Residential-1 zoning district for this development is .91-acres. The applicant is proposing to comply with the minimum recreation requirement by providing a payment in lieu of dedicating land. Should the Town Council approve the provision of a payment-in-lieu, the Town must use the money to acquire or develop recreation land to serve the residents of the subdivision or residents in the area.

We recommend that the Town Council authorize the provision of a payment-in-lieu because of the close proximity of Cedar Falls Park to the subdivision, and because of the small size of recreation area required with this subdivision, less than an acre. We recommend that the applicant provide documentation in support of the amount of payment anticipated. We note that costs associated with appraisal of the fair market value of land shall be borne by the developer

and recommend that documentation associated with the appraisal be included with the Final Plan application. The amount of payment must be approved by the Town Manager. A stipulation that a payment-in-lieu for recreation area be approved by the Town Manager and provided prior to approval of the final plat is included in Resolution A.

Pedestrian Trails: A Pedestrian Easement is incorporated into the design of the subdivision. Presently, a designated pedestrian easement abuts the site from the Cedar Hills Subdivision at the location of proposed Lot 12. The application proposes to extend the pedestrian easement into this subdivision. A 20-foot wide pedestrian easement is proposed to be located between Lots 11 and 12. The 20-foot pedestrian easement is proposed to include a six foot concrete path bordered with 4 foot fence on both sides of the easement. The path is proposed to connect with the proposed sidewalk within the new street right-of-way. The applicant proposes to have this easement controlled and maintained by the Homeowners' Association through the covenants and restrictions for the subdivision. The applicant proposes that the easement be a part of Lots 11 and 12.

We recommend approval of an unimproved pedestrian connection. However, we do not recommend that the pedestrian connection be located as an easement on individual lots. We recommend that the proposed pedestrian connection be located on land owned and controlled by a Homeowners' Association. We have included a stipulation to this effect in Resolution A.

TRANSPORTATION: ACCESS AND CIRCULATION

Primary access into the development is proposed from Weaver Dairy Road. The proposed site plan also includes a stub-out to the Kitchen property for future access at the time that the property is developed.

Weaver Dairy Road: Vehicular access for this site is proposed from Weaver Dairy Road. The existing joint driveway onto Weaver Dairy Road is proposed to be closed. Access to the existing two houses is proposed to be provided from the new subdivision road.

The applicant is proposing to dedicate an additional 15 foot right-of-way along the project's 460 feet of Weaver Dairy Road frontage and provide a payment-in-lieu for improvements to this Weaver Dairy Road frontage. We note that the Council has asked that a letter be sent to the State Department of Transportation requesting that work be suspended on Weaver Dairy Road. Given the small amount of Weaver Dairy Road frontage associated with this application, we recommend acceptance of the proposed payment. We do not recommend a payment for road widening at this time. We have included a stipulation in Resolution A that the applicant make a payment-in-lieu equivalent to the payment for sidewalk and curb and gutter. We recommend that a conceptual design and a cost estimate for a determination of the amount of payment be approved by the Town Manager prior to the issuance of a Zoning Compliance Permit.

New Subdivision Road: The applicant is proposing a cross-section for the subdivision's main street that varies from typical Town Standards. We summarize the situation as follows, with our recommendation:

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Town Standard Cross-Section	Applicant's Cross-Section	Recommended Alternative Cross-Section
Right-of-way: 50-foot to include a 22-foot pavement section, 30-inch curb and gutter and 5-foot sidewalk.	Right-of-way: 50-foot to include a 22-foot pavement section, 24-inch curb and gutter and 5-foot sidewalk.	Right-of-way: 30-foot to include a 22-foot pavement section with adjacent 5-foot sidewalk and a 3-foot shoulder, swales in private drainage easement outside the right-of-way

The street cross-section proposed for the new subdivision road does not meet the Town's standard for a typical local street. We recommend that the applicant employ the Town Standard cross-section or consider the use of an alternative cross-section that we believe may better address storm water issues and occasional on-street parking.

We note that the applicant is proposing to install sidewalk on the west side of the subdivision road.

A stipulation with the recommendation that either the Town Standard cross-section or the alternative cross-section requirement be employed for the design of the subdivision road is included in Resolution A.

Traffic Impact: The initial subdivision application included a traffic impact study for 12 lots on 8.9 acres. No impact on traffic was expected on Weaver Dairy Road with 12 lots. We expect no additional, significant impact on traffic on Weaver Dairy road with the increase of 5 additional lots.

Construction Management Plan: Resolution A includes a recommendation that a Construction Management Plan, indicating how construction vehicle traffic will be managed, be approved by the Town Manager prior to the issuance of a Zoning Compliance Permit.

LANDSCAPING AND TREE PROTECTION

Buffer Requirements: The following landscape buffer is required for this subdivision:

- Type "D" landscape bufferyard (minimum 30-foot width) along the property's frontage with Weaver Dairy Road.

We note that the applicant has labeled the Weaver Dairy Road Type "D" buffer. The Weaver Dairy Road bufferyard is proposed to be deeded to the Cross Creek Homeowners' Association and maintained through the covenants and restrictions of the subdivision.

Resolution A includes a stipulation that the applicant provide the minimum landscape bufferyard requirements, as listed above, and deed the area to the Homeowners' Association.

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Landscape and Tree Protection: A Landscape Protection Plan has been provided. Two specimen 25-inch diameter at breast height (dbh) pine trees and a specimen 31-inch dbh white oak are proposed to be removed for the construction of the subdivision road. There are few significant trees on the property. All of the significant trees are pines with the exception of the white oak. The white oak is in moderate condition. We have included a stipulation in Resolution A requiring preservation of the 31-inch white oak.

A stipulation has been included in Resolution A that the Landscape Protection Plan be approved by the Town Manager prior to issuance of a Zoning Compliance Permit.

We recommend that the Landscape Protection Plan include protective fencing between construction and existing vegetation to be retained in the following locations:

- a) The required landscape bufferyards;
- b) The land designated for infrastructure construction; and
- c) Adjacent to any construction within the Resource Conservation District.

We also recommend that tree protection fencing be installed between construction, including all required off-site infrastructure construction, and all specimen trees shown on the site plan as to remain. We recommend that all tree protection fencing be installed at a distance from the base of the tree equal to at least one foot for every inch of diameter at breast height (dbh).

We also recommend that Final Plans include a detailed planting plan indicating how the required bufferyards will be planted. These conditions have been included in Resolution A.

ENVIRONMENT

Watershed Protection District: This property is not within the Town's Watershed Protection District and, therefore, is not required to comply with either the low-density or high-density options of the Development Ordinance.

Resource Conservation District: Approximately 3.2 acres of Resource Conservation District are located on this site. The Resource Conservation District extends along Cedar Fork Creek drainage way through the middle of the site and at the southernmost tip of the property along a tributary of Cedar Fork Creek.

The applicant is proposing land disturbance within the Resource Conservation District in order to construct a bottomless pipe arched bridge to serve the new road which proposes to cross Cedar Fork Creek. A stipulation has been included in Resolution A that states that prior to issuance of a Zoning Compliance Permit, requirements and standards of Subsection 5.6 of the Development Ordinance and all other applicable Resource Conservation District regulations must be met.

We note that the Resource Conservation District extends onto proposed Lots 2, 3, 8, 9, 10, 14, and 15. We also note that the proposed site plan locates several infrastructure elements, (storm water drainage basins, drainage easements, and sewer lines) in close proximity to the Resource Conservation District boundary. Although not shown encroaching into the Resource

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Conservation District area, the infrastructure improvements and associated residential clearing and grading are close to the Resource Conservation District. We recommend that all required erosion control sediment basins, stormwater basins, infrastructure and residential construction, including associated clearing and grading, be located entirely outside of the Resource Conservation District. A stipulation restricting activities in the Resource Conservation District is included in Resolution A. With this recommended stipulation, we believe land disturbance within the Resource Conservation District will be minimal.

We recommend that the boundaries of the Resource Conservation District be shown on the final plat and final plans with a note indicating that "Development in the Resource Conservation District shall be in accordance with Development Ordinance." We recommend that no lot be created that would require a Resource Conservation District variance in order to be developed. These recommendations have been incorporated into Resolution A.

Stormwater Management:

Problems with flooding downstream from the proposed site, especially between the site and the adjacent residential lots along Cedar Hills Drive (on the west side of the street), have occurred in the past. The Town recently completed stormwater improvements in the area. The improvements included an upsized drainage pipe beneath a driveway on Cedar Hills Drive that carries the waters of Cedar Fork Creek downstream from the site.

The applicant has stated that problems identified downstream from the site are related to existing development in the natural floodplain of Cedar Fork Creek and secondly that a possibility exists that the pipe beneath Cedar Hills Drive may be constricting the flow where Cedar Fork Creek joins with an unnamed tributary.

The original channel of Cedar Fork Creek is believed to have been altered when the Cedar Hills Subdivision was developed. A 1974 topographic map shows Cedar Fork Creek crossing the property immediately downstream of the site in a diagonal direction. Today, the channel runs along the north and east edges of the lot at 110 Cedar Hills Drive.

Stormwater detention and stormwater quality measures are proposed on the subdivision site. Proposed measures include:

- Utilizing oversized stormwater pipes and restricted outlets.
- Providing vegetated swales outside the Resource Conservation District.
- Providing level spreaders outside the Resource Conservation District.

The applicant has indicated that the drainage situation downstream will not be worsened, if this proposed development is accompanied by employment of these Best Management Practices.

The use of vegetated swales and level spreaders is designed to outlet the storm drainage water overland rather than through pipes. Level spreaders are proposed to act as settling basins for suspended solids and are proposed at the terminus of the grass swales. The stormwater is proposed to be released at the outer edges of the Resource Conservation District buffer via level spreaders that minimize point source impacts on the stream and maximize the natural vegetative scrubbing effect of the leaf litter within the stream buffer. The sand filter at the bottom of the

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level spreaders would include a drain pipe to release water into the Resource Conservation District. A stipulation has been included in Resolution A requiring that the level spreader be designed to adequately treat the first one inch of rainfall from the developed lots.

The grass swales are proposed to act as a biofilter due to the characteristics of the vegetation. The vegetation absorbs some pollutants and is intended to aid in the settlement of suspended solids within the runoff. The stormwater is given a chance to dissipate while the beneficial stormwater quality effect of the grass lining the swales occurs. Final design and locations are to be reviewed and approved by the Town Manager prior to the issuance of a Zoning Compliance Permit. This stipulation is included in Resolution A.

The 20-foot wide drainage easements on the outside edge of each side of the Resource Conservation District are proposed to contain the swales that will be maintained by the Homeowners' Association. We recommend that all stormwater management improvements outside the public right-of-way be located within storm drainage way easements in accordance with Town guidelines. These guidelines require a 30 foot minimum width drainage way easement. We have included a stipulation in Resolution A that requires a 30 foot drainage way easement. We also recommend that these stormwater maintenance features not be permitted within an approved landscaped bufferyard area. A stipulation has been included in Resolution A to this effect.

The applicant has designed the creek crossing for the new road as a bottomless arch pipe structure. This design is believed to be an environmentally sensitive solution for the Resource Conservation District as it leaves a large area undisturbed.

Stormwater detention is proposed that will utilize oversized pipes and restricted outlets to maintain post-development discharge rates at pre-development discharge rates below a certain rainfall intensity.

We recommend that, prior to the issuance of a Zoning Compliance Permit, the applicant submit a Stormwater Management Plan for Town Manager approval. The plan shall demonstrate that the drainage situation downstream with the subdivision proposal is no worse than it is on the date of this adopted resolution according to methodology approved by the Town Manager. We recommend that the plan be based on the 1-year and 50-year frequency, 24-hour duration storms, where the post-development stormwater run-off rate does not exceed the pre-development rate. Engineered stormwater facilities shall also remove 85% total suspended solids and treat the first inch of precipitation utilizing NC Division of Water Quality design standards. This stipulation is included in Resolution A.

Erosion Control: Resolution A includes a stipulation that a soil erosion and sedimentation control plan, including provisions for maintenance of facilities and modification of the plan if necessary, be approved by the Orange County Erosion Control Officer, and that a copy of the approval be provided to the Town Manager prior to the issuance of a Zoning Compliance Permit. The recommended resolution also requires that all erosion control sediment basins, including associated clearing and grading, be located entirely outside of the Resource Conservation District.



UTILITIES AND SERVICES

Utilities: The proposed installation of sewer line in the development will not involve land disturbance in the Resource Conservation District. The existing 30 foot OWASA easement abutting the subdivision is proposed to be used to extend sanitary sewer lines to the proposed development. The new easement on the site is proposed between Lots 13 and 14. In order to install sanitary sewer, a thirty foot swath is cleared for the utility corridor. We recommend that tree protection fencing be installed along the cleared corridor.

Lot 3, as proposed, would contain a 30 foot OWASA easement on the west side of the new subdivision road. The proposed sewer easement stubs out at the property line of the Kitchen property.

Power lines are required to be placed underground in accordance with Section 14.10 of the Development Ordinance. All new utility lines are proposed to be placed underground. An existing overhead Duke Power Company utility line runs along the back of Lots 1, 2, 3, and 4 serving the Kitchen property. The applicant is not proposing to place it underground and believes that the power line is located away from interference with proposed construction.

An 8-inch water line is proposed to serve the development and is down-sized to a 4 inch line at the termination of the new road. The line is located in the middle of the road. We note that OWASA has indicated that an 8-inch water line is required throughout the entirety of the development.

We recommend that the necessary easements for sewer line infrastructure be dedicated. We recommend that this plat be reviewed and approved by OWASA prior to recordation. This stipulation has been included in Resolution A.

Local utility companies have indicated that they can serve the site. We recommend that the final utility/lighting plans be approved by OWASA, Duke Power Company, Time Warner Cable, Public Service Company, BellSouth, and the Town Manager before issuance of a Zoning Compliance Permit. We also recommend that the final plans indicate that all new utility lines shall be placed underground. Stipulations to this effect have been included in Resolutions A.

Fire: It appears that the proposed hydrants are 600 feet apart. The maximum spacing between fire hydrants is not to exceed 500 feet from proposed of new hydrants. These recommendations are included in Resolution A.

A Fireflow Report sealed by an engineer registered in the State of North Carolina must be provided for Town Manager review and approved prior to the issuance of a Zoning Compliance Permit. A stipulation has been included in Resolution A to this effect.

Refuse Collection: Resolution A includes a stipulation that a solid waste management plan, including provisions for recycling, should be submitted for review and approval prior to issuance of a Zoning Compliance Permit.

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CONCLUSION

We believe the proposal, if developed in accordance with the stipulations in Resolution A would meet or exceed all stated requirements in the Development Ordinance.

Resolution E would deny the request.

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**Checklist of
Regulations and Standards
Application for Preliminary Plat**

PRELIMINARY PLAT FOR CROSS CREEK SUBDIVISION	STAFF EVALUATION	
	COMPLIANCE	NON COMPLIANCE
Meets or Exceeds Minimum Lot Size	√	
Meets or Exceeds Minimum Lot Width	√	
Meets or Exceeds Minimum Lot Frontage	√	
Lots Front on a Road Meeting Town Standards	√ (with conditions)	
Access Meets Section 14.5 of the Development Ordinance and the Design Manual	√	
Circulation Meets Section 14.5 of the Development Ordinance and the Design Manual	√	
Recreation Area Size Meets Section 17.9.2 of the Development Ordinance	payment-in-lieu proposed	
Recreation Area Type Meets Section 17.9.3 of the Development Ordinance	payment-in-lieu proposed	
If Cluster Subdivision, Meets Cluster Provisions	N/A	
Meets or Exceeds Minimum Landscape Buffers	√ (with conditions)	
Public Water and Sewer Available	√	
If County Health Department Approval Needed, Received	N/A	
Resource Conservation District Regulations	√	
Watershed Protection District Regulations	N/A	
Homeowners' Association Proposal	√	
Reservation of a School Site, if Applicable	N/A	
Drainage Plan	√	
Floor Area Restrictions under Section 13.11 of the Development Ordinance	√	

N/A = Not Applicable *With Sewer Plan

prepared 2/13/02

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ATTACHMENT 3

RESOLUTION A
(Manager's Preliminary Recommendation)

A RESOLUTION APPROVING AN APPLICATION FOR A PRELIMINARY PLAT FOR CROSS CREEK SUBDIVISION

BE IT RESOLVED by the Council of the Town of Chapel Hill that it finds that the Cross Creek Subdivision, proposed by Design Response, on the property identified as Chapel Hill Township Tax Map 25, Lots 2 and 2C, if developed according to the preliminary site plan dated December 5, 2000, revised October 11, 2001, and the conditions listed below, would comply with the provisions of the Development Ordinance:

These findings are based on the following:

Stipulations Specific to the Development

1. Expiration of Preliminary Plat: That this Preliminary Plat approval shall be valid for one year from the date of approval subject to reapproval by the Town Manager in accordance with the provisions of the Development Ordinance.
2. Number of Lots and Floor Area Restrictions: That this approval shall authorize the creation of 17 lots on 12.78 acres with Lots 16 and 17 each restricted to a dwelling unit with no more than 1,350 square feet of floor area and Lot 2 is restricted to a dwelling unit with no more than 1,100 square feet of floor area.

Lot 16 shall be deconstructed to comply with the 1,350 square foot restricted floor area size. Deconstruction shall be completed prior to Town Manager approval of the Final Subdivision Plat.

These restrictions shall be referenced in the Homeowners' Association documents.

Required Improvements

3. New Road: That the new road shall be constructed either:
 - To a 30-foot right-of-way to include a 22-foot pavement section, with adjacent 5-foot sidewalk on the west side of the road and a 3-foot shoulder, swales in drainage easement deeded to the Homeowners' Association outside the right-of-way; or
 - To a 50-foot right-of-way to include a 22-foot pavement section, 30-inch curb and gutter and 5-foot sidewalk.
4. Payment-in-Lieu for Weaver Dairy Road Improvements: We recommend that the applicant dedicate an additional 15 feet of right-of-way on the Weaver Dairy Road frontage and provide a payment-in-lieu for curb and gutter and for sidewalk.

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The applicant shall provide a conceptual design and a cost estimate for a determination of the amount of payment prior to the issuance of a Zoning Compliance Permit. The payment shall be made prior to approval of the final plat.

5. Weaver Dairy Road Right-of-Way: That the applicant shall dedicate an additional 15 feet of right-of-way along the Weaver Dairy Road frontage.
6. Alternative Road Design for White Oak Tree Protection: An alternative subdivision road design shall be provided which would preserve the 31-inch white oak tree. The applicant shall include tree protection fencing around the critical root zone of the tree as part of the Landscape Protection Plan.

Stipulations Related to Recreation

7. Payment-in-Lieu for Minimum Recreation Requirements: That the developer provide a payment-in-lieu of providing a minimum of .91 acres of recreation area for this development. The payment amount shall be approved by the Town Manager in accordance with the Development Ordinance, Section 17.9.5.

The recreation payment amount shall be approved by the Town Manager prior to issuance of a Zoning Compliance Permit and shall be paid prior to approval of the final plat. We recommend that the payment-in-lieu proceeds be used at Cedar Falls Park and/or the Dry Creek Greenway.

8. Pedestrian Connection: That the pedestrian connection be provided as a twenty-foot wide strip of land, deeded to the Homeowners' Association. The strip of land shall contain an unimproved public pedestrian and non-motorized vehicular easement.

Stipulations Related to Resource Conservation District

9. Boundaries: That the boundaries of the Resource Conservation District be indicated on the final plat and plan. A note shall be added to all final plats and plans, indicating, "Development shall be restricted within the Resource Conservation District in accordance with the Chapel Hill Development Ordinance."
10. Variances: That all variances necessary for development within the Resource Conservation District be obtained before application for final plat or Final Plan approval for the subject phase(s) of development.
11. Buildable Lots: That no lot be created that would require a Resource Conservation District Variance in order to be built upon.

In addition, for each lot it must be demonstrated that there is sufficient buildable area outside the Resource Conservation District, slopes of 25% or greater, water quality vegetated buffers, other required landscape buffers, easements, and any applicable building setback limits.

(85)

12. Construction Standards: That for the roadway encroachment into the Resource Conservation District, the requirements and standards of Subsections 5.6 and 5.8 of the Development Ordinance and all other applicable Resource Conservation District regulations must be adhered to, unless the application is granted administrative exemptions from provisions of Subsection 5.8.

All required erosion control sediment basins and stormwater improvements, outside the public right-of-way, including associated clearing and grading, shall be located entirely outside of the Resource Conservation District. All grading associated with the construction of a residence shall be located entirely outside of the Resource Conservation District.

Stipulations Related to Steep Slopes

13. Steep Slopes: That each submittal for Final Plan approval shall include a map showing lots and street segments on slopes of 10% or more, and indicating how the development and construction will comply with the steep slopes regulations in the Development Ordinance:
- for slopes of 10 - 15%, site preparation techniques shall be used which minimize grading and site disturbance;
 - for slopes of 15 - 25%, demonstrate specialized site design techniques and approaches for building and site preparation; and
 - for slopes of 25% or greater, provide a detailed site analysis of soil conditions, hydrology, bedrock conditions, and other engineering or environmental aspects of the site.

Each Final Plan application shall demonstrate compliance with the steep slopes regulations in the Development Ordinance. The Town Manager shall decide if the proposed building and site engineering techniques are appropriate. These restrictions shall be referenced in the Homeowners' Association documents.

14. Required Landscape Bufferyard: The following landscape buffer is required for this subdivision:
- Type "D" landscape bufferyard (minimum 30-foot width) along the property's frontage with Weaver Dairy Road

The Landscape buffer shall be on land deeded to the Homeowners' Association.

15. Landscape Protection Plan: That a Landscape Protection Plan be approved by the Town Manager prior to issuance of a Zoning Compliance Permit. The Landscape Protection Plan shall include tree protection fencing between infrastructure construction and existing vegetation to be retained in the following locations:
- a) The required landscape bufferyards;
 - b) Adjacent to any construction within the Resource Conservation District; and



- c) Between construction and rare and specimen trees to remain.

That all tree protection fencing shall be installed at a distance from the base of the tree equal to at least one foot per diameter at breast height (dbh).

16. Landscape Planting Plan: That a Landscape Planting Plan be approved by the Town Manager prior to issuance of a Zoning Compliance Permit. The plan must indicate how the required bufferyards will meet the minimum landscape planting standards. The Landscape Planting Plan shall also include a plant list, indicating type, size and number of proposed plant.

Stipulations Related to Homeowners' Association

17. Homeowners' Association: That a Homeowners' Association be created that has the capacity to place a lien on the property of a member who does not pay the annual charges for maintenance of common areas, however designated. The Homeowners' Association documents shall be reviewed and approved by the Town Manager prior to recordation at the Orange County Register of Deeds Office and shall be cross-referenced on the final plat.

Stipulations Related to Water, Sewer, and Other Utilities

18. Utility/Lighting Plan Approval: That the final utility/lighting plan be approved by Duke Power Company, Orange Water and Sewer Authority, BellSouth, Public Service Company, Time Warner Cable, and the Town Manager prior to issuance of a Zoning Compliance Permit.
19. OWASA Easements: That easement documents as required by OWASA and the Town Manager be recorded concurrently with the final plat. That the final plat shall be approved by OWASA prior to Town approval.
20. Placement of Utility Lines Underground: That the final plans indicate that all new utility lines shall be placed underground.
21. Fire Flow: That a fire flow report, prepared by a registered professional engineer, and showing that flows meet the minimum requirements of the Design Manual, be approved prior to issuance of a Zoning Compliance Permit.
22. Fire Hydrant Spacing: That maximum spacing between fire hydrants shall not exceed 500 feet, unless modified by the Town Manager.

Miscellaneous Related To Stormwater Management

23. Stormwater Management Plan: That prior to the issuance of a Zoning Compliance Permit the applicant submit a Stormwater Management Plan for review and approval by the Town Manager. The plan shall demonstrate that the drainage situation downstream with the subdivision proposal is no worse than it is on the date of this adopted resolution, according to methodology approved by the Town Manager. The plan shall be based on the 1-year and 50-year frequency, 24-hour duration storms, where the post-development stormwater run-off

(87)

rate shall not exceed the pre-development rate. Engineered stormwater facilities shall also remove 85% total suspended solids and treat the first inch of precipitation utilizing NC Division of Water Quality design standards. All stormwater management improvements outside public right-of-way must be located within storm drainageway easements and shall not be permitted within approved bufferyard areas.

24. Best Management Practices: That the level spreader design utilize design methods, based on best available information from the NC State University Cooperative Extension. Final design and locations shall be reviewed and approved by the Town Manager prior to the issuance of a Zoning Compliance Permit. These features shall not be permitted within approved bufferyard areas.

The level spreader BMP's shall be designed to adequately treat the first one inch of rainfall from the developed sites.

25. Storm Drainageway Easement: That all stormwater management improvements outside public right-of-way be located within reserved storm drainage way easements, of a 30 foot width minimum and be entirely outside the Resource Conservation District.

All proposed drainage swales and constructed stormwater facilities shall be in drainage easements deeded to the Homeowners' Association.

26. Public and private stormwater drainage curb hood/covers shall be pre-cast stating, "Dump No Waste! Drains to Jordan Lake", in accordance with the specifications of the Town Standard Detail SD-5A.

Miscellaneous Stipulations

27. Construction Management Plan: That a Construction Management Plan, indicating how construction vehicle traffic will be managed, be approved by the Town Manager prior to the issuance of a Zoning Compliance Permit. That the Construction Management Plan specify that no construction vehicles serving this site may use any existing streets within the Cedar Hills Subdivision with one exception: that Cedar Hills Drive may be used for construction traffic to extend the sewer line from Cedar Hills Drive to the east side of the proposed subdivision.
28. Solid Waste Management Plan: That a Solid Waste Management Plan, and a plan for managing and minimizing construction debris, shall be approved by the Town Manager prior to the issuance of a Zoning Compliance Permit.
29. Open Burning: That the open burning of trees, limbs, stumps and construction debris association with this development is prohibited unless it is demonstrated to the Town Manager or his designee that no reasonable alternative means are available for removal of the materials from the subject property. The Fire Marshall may establish safety standards, which must be met in order to receive a permit under this Article.

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30. Detailed Plans: That final detailed site plans, grading plans, utility/lighting plans, stormwater management plans (with hydrologic calculations), and landscape plans and landscape maintenance plans be approved by the Town Manager prior to issuance of a Zoning Compliance Permit, and that such plans conform to the plans approved by this application and demonstrate compliance with all applicable conditions and the design standards of the Development Ordinance and the Design Manual.
31. As-Built Plans: That as-built plans in DXF binary format using State plane coordinates, shall be provided for street improvements and all other existing or proposed impervious surfaces prior to issuance of the first Certificate of Occupancy.
32. Plant Rescue: That the applicant consider conducting plant rescue activities on the site prior to initiation of development activity.
33. Certificates of Occupancy: That no Certificates of Occupancy be issued until all required public improvements are completed; and that a note to this effect shall be placed on the final plat.
- That if the Town Manager approves a phasing plan, no Certificates of Occupancy shall be issued for a phase until all required public improvements for that phase are complete; no Building Permits for any phase shall be issued until all public improvements required in previous phases are completed to a point adjacent to the new phase, and that a note to this effect shall be placed on the final plat.
34. Erosion Control: That a detailed soil erosion and sedimentation control plan, including provision for maintenance of facilities and modifications of the plan if necessary, be approved by the Orange County Erosion Control Officer and the Town Manager prior to issuance of a Zoning Compliance Permit.
- That a performance guarantee be provided in accordance with Section 5-97.1 of the Town Code of Ordinances prior to issuance of any permit to begin land-disturbing activity.
- All erosion control sediment basins, including associated clearing and grading, be located entirely outside of the Resource Conservation District.
35. Silt Control: That the applicant takes appropriate measures to prevent and remove the deposit of wet or dry silt on adjacent paved roadways.
36. Street Names and Addresses: That the name of the development and its streets and house numbers be approved by the Town Manager prior to the issuance of a Zoning Compliance Permit.
37. Construction Sign: That the applicant post a construction sign that lists the property owner's representative and telephone number, the contractor's representative and telephone number, and a telephone number for regulatory information at the time of issuance of a Building Permit, prior to the commencement of any land disturbing activities. The construction sign may have a maximum of 16 square feet of display area

and may not exceed 6 feet in height. The sign shall be non-illuminated, and shall consist of light letters on a dark background

38. Continued Validity: That continued validity and effectiveness of this approval is expressly conditioned on the continued compliance with the plans and conditions listed above.
39. Non-severability: That if any of the above conditions is held to be invalid, approval in its entirety shall be void.

NOW, THEREFORE, BE IT RESOLVED by the Council of the Town of Chapel Hill that the Council hereby approves the application for a Preliminary Plat for the Cross Creek Subdivision in accordance with the plans and conditions listed above.

This the _____ day of _____, 2002.

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ATTACHMENT 4

RESOLUTION B
Planning Board Recommendation**A RESOLUTION APPROVING AN APPLICATION FOR A PRELIMINARY PLAT FOR CROSS CREEK SUBDIVISION (File # 7.25..2, 2C)**

BE IT RESOLVED by the Council of the Town of Chapel Hill that it fails to finds that the Cross Creek Subdivision, proposed by Design Response, on the property identified as Chapel Hill Township Tax Map 25, Lots 2 and 2C, if developed according to the preliminary site plan dated December 5, 2000, revised October 11, 2001, and the conditions listed below, would comply with the provisions of the Development Ordinance:

1. Resolution A: That all stipulations in Resolution A shall apply to the proposed development, unless modified or superseded by those stipulations below.
2. Removal of White Oak for Construction of Subdivision Road: That the white oak tree be removed for the construction of the subdivision road.
3. Weaver Dairy Road: That the applicant provide a payment-in-lieu for Weaver Dairy Road improvements. These Weaver Dairy Road improvements shall be in accordance with one-half of the 89-foot approved cross-section. The applicant shall provide a conceptual design and a cost estimate for a determination of the amount of payment prior to the issuance of a Zoning Compliance Permit. The payment shall be made prior to approval of the final plat.
4. Stormwater Management Plan: That prior to the issuance of a Zoning Compliance Permit the applicant submit a Stormwater Management Plan for review and approval by the Town Manager. The plan shall be based on the 1-year and 50-year frequency, 24- hour duration storms, where the post-development stormwater run-off rate shall not exceed the pre-development rate. Engineered stormwater facilities shall also remove 85% total suspended solids and treat the first inch of precipitation utilizing NC Division of Water Quality design standards. All stormwater management improvements outside public right-of-way must be located within storm drainage way easements and shall not be permitted within approved bufferyard areas.

NOW, THEREFORE, BE IT RESOLVED by the Council of the Town of Chapel Hill that the Council hereby approves the application for a Preliminary Plat for the Cross Creek Subdivision.

This the _____ day of _____, 2002.

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ATTACHMENT 5

RESOLUTION C
Transportation Board Recommendation**A RESOLUTION APPROVING AN APPLICATION FOR A PRELIMINARY PLAT FOR CROSS CREEK SUBDIVISION (File # 7.25..2, 2C)**

BE IT RESOLVED by the Council of the Town of Chapel Hill that it finds that the Cross Creek Subdivision, proposed by Design Response, on the property identified as Chapel Hill Township Tax Map 25, Lots 2 and 2C, if developed according to the preliminary site plan dated December 5, 2000, revised October 11, 2001, and the conditions listed below, would comply with the provisions of the Development Ordinance:

1. Resolution A: That all stipulations in Resolution A shall apply to the proposed development, unless modified or superseded by those stipulations below.
2. Local Subdivision Road: That the subdivision road be constructed with two 10-foot travel lanes rather than two 11-foot travel lanes.
3. Subdivision Sidewalks: That 5-foot sidewalks be provided on both sides of the subdivision road.
4. Neighborhood Park: That the developer be required to provide a small neighborhood park rather than payment-in-lieu for recreation improvements, to be owned and maintained by the Homeowners' Association.
5. Weaver Dairy Road: That the applicant provide a payment-in-lieu for Weaver Dairy Road improvements. These Weaver Dairy Road improvements shall be in accordance with one-half of the 89-foot approved cross-section. The applicant shall provide a conceptual design and a cost estimate for a determination of the amount of payment prior to the issuance of a Zoning Compliance Permit. The payment shall be made prior to approval of the final plat.
6. Stormwater Management Plan: That prior to the issuance of a Zoning Compliance Permit the applicant submit a Stormwater Management Plan for review and approval by the Town Manager. The plan shall be based on the 1-year and 50-year frequency, 24-hour duration storms, where the post-development stormwater run-off rate shall not exceed the pre-development rate. Engineered stormwater facilities shall also remove 85% total suspended solids and treat the first inch of precipitation utilizing NC Division of Water Quality design standards. All stormwater management improvements outside public right-of-way must be located within storm drainage way easements and shall not be permitted within approved bufferyard areas.

NOW, THEREFORE, BE IT RESOLVED by the Council of the Town of Chapel Hill that the Council hereby approves the application for a Preliminary Plat for the Cross Creek Subdivision in accordance with the plans and conditions listed above.

This the _____ day of _____, 2002.

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ATTACHMENT 6

RESOLUTION D

Bicycle and Pedestrian Advisory Board Recommendation

A RESOLUTION APPROVING AN APPLICATION FOR A PRELIMINARY PLAT FOR CROSS CREEK SUBDIVISION (File # 7.25..2, 2C)

BE IT RESOLVED by the Council of the Town of Chapel Hill that it fails to finds that the Cross Creek Subdivision, proposed by Design Response, on the property identified as Chapel Hill Township Tax Map 25, Lots 2 and 2C, if developed according to the preliminary site plan dated December 5, 2000, revised October 11, 2001, and the conditions listed below, would comply with the provisions of the Development Ordinance:

1. Resolution A: That all stipulations in Resolution A shall apply to the proposed development, unless modified or superseded by those stipulations below.
2. Weaver Dairy Road: That the applicant provide a payment-in-lieu for Weaver Dairy Road improvements. These Weaver Dairy Road improvements shall be in accordance with one-half of the 89-foot approved cross-section. The applicant shall provide a conceptual design and a cost estimate for a determination of the amount of payment prior to the issuance of a Zoning Compliance Permit. The payment shall be made prior to approval of the final plat.
3. Stormwater Management Plan: That prior to the issuance of a Zoning Compliance Permit the applicant submit a Stormwater Management Plan for review and approval by the Town Manager. The plan shall be based on the 1-year and 50-year frequency, 24- hour duration storms, where the post-development stormwater run-off rate shall not exceed the pre-development rate. Engineered stormwater facilities shall also remove 85% total suspended solids and treat the first inch of precipitation utilizing NC Division of Water Quality design standards. All stormwater management improvements outside public right-of-way must be located within storm drainage way easements and shall not be permitted within approved bufferyard areas.

NOW, THEREFORE, BE IT RESOLVED by the Council of the Town of Chapel Hill that the Council hereby approves the application for a Preliminary Plat for the Cross Creek Subdivision in accordance with the plans and conditions listed above.

This the ____ day of _____, 2002.

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ATTACHMENT 7

RESOLUTION E
Denying the Application**A RESOLUTION DENYING AN APPLICATION FOR A PRELIMINARY PLAT FOR
CROSS CREEK SUBDIVISION**

BE IT RESOLVED by the Council of the Town of Chapel Hill that it fails to finds that the Cross Creek Subdivision, proposed by Design Response, on the property identified as Chapel Hill Township Tax Map 25, Lots 2 and 2C, if developed according to the preliminary site plan dated December 5, 2000, revised October 11, 2001, and the conditions listed below, would comply with the provisions of the Development Ordinance:

(INSERT REASONS FOR DENIAL)

NOW, THEREFORE, BE IT RESOLVED that the Council of the Town of Chapel Hill that the Council hereby denies the application for a Preliminary Plat for the Cross Creek Subdivision in accordance with the plans and conditions listed above.

This the _____ day of _____, 2002.

ATTACHMENT 8**RESOLUTION F**
Planning Board's Secondary Recommendation

(94)

A RESOLUTION REGARDING STORMWATER ISSUES IN THE CEDAR HILLS DRIVE AREA

WHEREAS, the Council of the Town of Chapel Hill has received a recommendation from the Town Planning Board regarding storm drainage issues along Cedar Hills Drive, downstream from the proposed Cross Creek Subdivision; and

WHEREAS, the Council has been made aware of drainage concerns in this area, particularly as they relate to the size of the culvert under Cedar Hills Drive near Silo Drive.

NOW, THEREFORE, BE IT RESOLVED by the Council of the Town of Chapel Hill that the Town Manager is directed to investigate the concerns and prepare a report to the Council.

This the _____ day of _____, 2002.

(95)

Subject: Cross Creek Subdivision –
Application for a Preliminary Plat Approval

Meeting Date: January 8, 2002

Recommendation: That the Council approve this application for Preliminary Plat Approval with conditions as recommended in the Planning Staff Report dated January 8, 2002 with the following changes:

- That stipulation #6 requiring an alternative road design to preserve the white oak be deleted.
- That the pedestrian connection be a twenty-foot unimproved easement deeded to the Homeowners Association (stipulation #8).
- That stipulation #14 contain only the Type “D” buffer requirement and the Type “B” buffer requirement be deleted from stipulation #14.
- That stipulation #25 keep the width of the drainage easement 30 feet in private drainage easements outside the right-of-way.
- That stipulation #27 include the exception to the Construction Management Plan that Cedar Hills Drive be used extend the sewer line from a manhole in Cedar Hills Drive to the Cross Creek Subdivision.

Vote: 6-1

Aye: John Hawkins (Chair), Scott Radway (Vice-chair), Julie Coleman, Gay Eddy, Nancy Gabriel, Bob Reda

Nay: Ruby Sinreich

Reasons for Dissent: Ms. Sinreich indicated the proposal did not meet the spirit of the Affordable Housing Regulations.

Secondary Recommendation: Recommend that the Council ask the Town Engineering Department to study the downstream stormwater management issues on Cedar Hills Drive, particularly as they relate to the size of the culvert under Cedar Hills Drive.

Vote: 7 – 0

Prepared by: John Hawkins, Chair, Planning Board
Kay Pearlstein, Staff *KP for JH*



SUMMARY OF TRANSPORTATION BOARD ACTION

Subject: Cross Creek Subdivision

Meeting Date: January 15, 2002

Recommendation: The Transportation Board voted to recommend the Council approve Resolution A, approving the proposed project with the following additions:

- The proposed local street be constructed with two 10' travel lanes
- The local street have 5' sidewalks on both sides
- The developer be required to provide a small neighborhood park rather than pay in lieu for recreation improvements

Vote: 4-3

Aye: Neville, Hintz, Hampton, Sayle
Nay: Howe, Dobbins, Schroeder

Reasons for Dissent:

Those voting no indicated they were concerned about the water runoff impact of two 5' foot sidewalks.

Prepared by:

Loren Hintz Chair, Chapel Hill Transportation Board
David Bonk, Senior Transportation Planner, Staff

CHAPEL HILL PARKS AND RECREATION COMMISSION

200 PLANT ROAD, CHAPEL HILL, NORTH CAROLINA 27514
VOICE/TTD: (919) 968-2784 • FAX: (919) 932-2923

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MEMORANDUM

TO: Mayor Foy and Council
FROM: John Covach, Chair, Parks and Recreation Commission
RE: Development Proposal for Cross Creek Subdivision
DATE: January 18, 2002

At its January 16 meeting the Commission voted unanimously (8-0) to recommend that the Council approve the plan for the Cross Creek Subdivision with the stipulation that the developer provide a payment in lieu of providing recreation area. The Commission recommends that payment in lieu proceeds be used at Cedar Falls Park and/or the Dry Creek Greenway.

Voting in favor of the motion: Covach, Rohrbacher, Anderson, Broad, Caldwell, Hemminger, Huskamp, and Tyson.

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**SUMMARY OF BICYCLE AND PEDESTRIAN
ADVISORY BOARD ACTION**

Subject: Cross Creek Subdivision – Preliminary Plat

Meeting Date: January 22, 2002

Recommendation: The Bicycle and Pedestrian Advisory Board recommends that the Council approve Resolution A, approving the application.

Vote: 6 – 0.

Aye: Eva Metzger (Chair), Barbara Chaiken, Kate Millard, Tom Mills, Wayne Pein, Doug Venema

Nay: none

Comments: The Board supported the unimproved pedestrian connection provided in Stipulation #8 of Resolution A.

Prepared by: Eva Metzger, Chair, Bicycle and Pedestrian Advisory Board EM (by TA)
Than Austin, Long Range Planner

**SOME KEY DIFFERENCES BETWEEN LEGISLATIVE
AND QUASI-JUDICIAL ZONING DECISIONS**

ATTACHMENT 13

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	<u>Legislative</u>	<u>Quasi-judicial</u>
Decision-maker	Only governing board can decide (others may advise)	Can be board of adjustment, planning board, or governing board
Notice of hearing	Newspaper and mailed notice to owners and neighbors required	Only notice to parties required unless ordinance mandates otherwise
Type of hearing	Legislative	Evidentiary
Speakers at hearings	Can reasonably limit number of speakers, time for speakers	Witnesses are presenting testimony, can limit to relevant evidence that is not repetitious
Evidence	None required; members free to discuss issue outside of hearing	Must have substantial, competent, material evidence in record; witnesses under oath, subject to cross-examination; no ex parte communication allowed
Findings	None required	Written findings of fact required
Voting	Simple majority, but 3/4 required if protest petition filed on rezoning	4/5 to decide in favor of applicant, but if special/conditional use permit is issued by governing board, only a simple majority required
Standard for decision	Creates standard	Can only apply standards previously set in ordinance
Conditions	Not allowed	Allowed if based on standard in ordinance
Time to initiate judicial review	Two months to file challenge	30 days to file challenge
Conflict of interest	Requires direct financial interest to disqualify	Any financial interest or personal bias disqualifies
Creation of vested right	None	Yes, if substantial expenditures are made in reliance on it

Source: David Owens, Institute of Government

TOWN OF CHAPEL HILL

PROJECT FACT SHEET - SUBDIVISION REQUEST

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Plans Dated 12/05/00

Revised 4/10/01

LOCATION INFORMATION

Name of Subdivision Cross Creek

Is this proposed as a cluster subdivision? No

Location (street address) Weaver Dairy Road

Tax Map, Block, and Lot Reference 7.25..2 and 7.25..2C

Parcel Identification Number (PIN) 9880-75-1091 and 9880-75-2497

Name of Applicant Jack L. Smyre (for Kimley-Horn and Associates, Inc.)

GROSS LAND AREA OF SUBDIVISION (sec. 13.5)

Net Land Area - Area within zoning lot boundaries NLA 544,500 SF (12.50 AC)

Credited Street Area CSA 2,080 SF (0.28 AC)

Credited Open Space COS

Gross Land Area = NLA+CSA+COS GLA 556,525 SF (12.78 AC)

Gross Land Area of subdivision 12.78 acres

Gross Land Area of this section or phase (if applicable) 12.78 acres

Zoning District(s) and area of each R-1 (12.78 acres)

PROJECT INFORMATION

Required minimum lot size 17,000 square feet

Total number of lots in subdivision 17 (2@1350 SF House, 1@1100 SF House)

Total number of lots in this section or phase 17 lots

Recreation area ratio (Sec. 17.9.2) 0.071 Minimum Rec. Area 39, 513 SF

If cluster development: Land in Rec. area from lot reductions N/A

Total area of recreation area (Proposed Payment-in-lieu) _____

Water: OWASA X Sewer: OWASA X

Individual wells _____ Individual septic tanks _____

Community wells _____ Community package plant _____

Other _____

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Electric Service:

Telephone Service:

Underground _____ X _____ Underground _____ X _____

Above ground _____ Above ground _____

Fire protection provided by Town of Chapel Hill

Solid waste collection provided by Town of Chapel Hill

Base Flood Elevation N/A

Total area within flood plain N/A

Total area within Resource Conservation District 3.20 AC

Is this site within the Watershed Protection District? No

If so, is high or low density stormwater management option chosen? N/A

Soil type(s) Appling Sandy Loam (ApB and ApC), Georgeville Silt Loam (GeB), and Herndon Silt Loam (HrC)

Generalized slope of site 2 - 10%

Historic/cultural features of value None Known

Forest/wildlife features of value None Known

Water features Site contains a porting of the upper reaches of Cedar Falls Creek

ADJOINING OR CONNECTING STREETS:

STREET NAME	RIGHT-OF-WAY WIDTH	PAVEMENT WIDTH	NUMBER OF LANES
1. <u>Weaver Dairy Road</u>	<u>60'</u>	<u>24'</u>	<u>2</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____

ADJOINING OR CONNECTING STREETS:

STREET NAME	AVERAGE DAILY TRAFFIC COUNT	SPEED LIMIT	PAVED OR UNPAVED	DESIGNATION (T) THOROUGHFARE (C) COLLECTOR (L) LOCAL
1. <u>Weaver Dairy Road</u>	_____	<u>35</u>	<u>Paved</u>	<u>T</u>
2. _____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____

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Oleander Business Center
5710 Oleander Drive, Suite 102, Wilmington, North Carolina 28403
Tel.: (910) 313-1874/75 Fax: (910) 313-1876

Wilmington, September 19, 2001

Town of Chapel Hill
306 North Columbia Street
Chapel Hill, NC 27516

RE: Application for Development Permit Cross Creek Subdivision

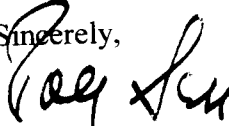
Dear Ladies and Gentlemen,

In order to comply with your development ordinance requiring house size restrictions on a certain percentage of the lots, our proposed subdivision is showing lot #2 with an 1,100 sqft. restriction and lots #16 and #17 with an 1,350 sqft. restrictions.

Rather than tearing down the existing house on lot #16 and adding more debris to the Town's landfill, we would like to bring this house into compliance with the ordinance by reducing the heated square footage. Our conversations with the planning staff indicated to us that there is no precedent for this scenario therefore we are asking you to consider the following:

We would like to maintain flexibility and look at the cost of different alternatives such as eliminating the sunroom on the attached sketch and reconfiguring the upstairs in order to create one bedroom and one bath. The remaining space which exceeds the 1,350 sqft. could be stripped of the trim, sheetrock, insulation, air conditioning ducts and portions of the electric wiring, thus giving it the same characteristics of unfinished attic space. A different solution may be to leave the sunroom and frame-in the portion of the porch adjacent to this room and treating the entire upstairs as walk-up, unfinished attic space.

If there are different or additional measures which we would need to take in order to make this house comply with the ordinance, we will certainly consider the same.

Sincerely,


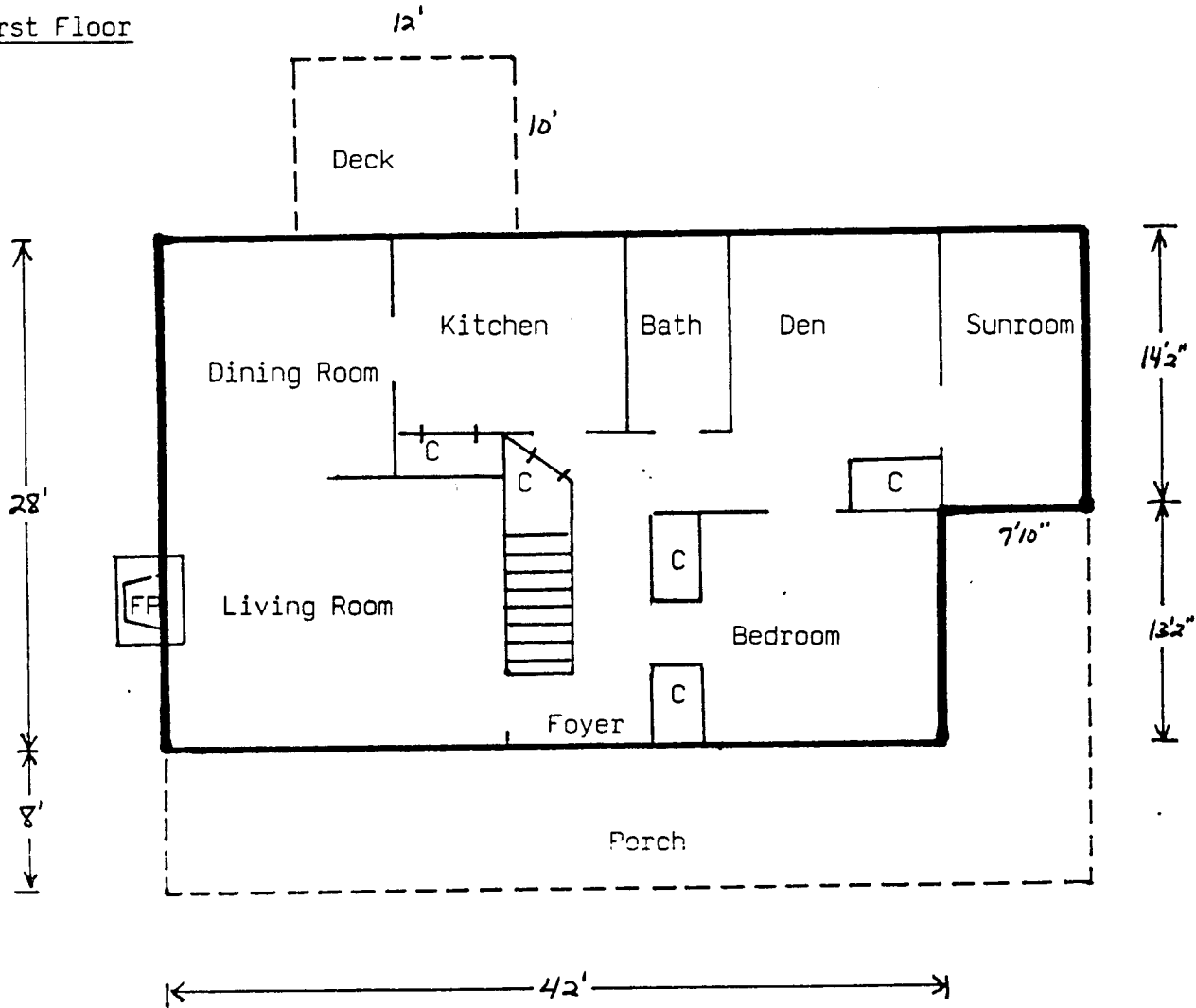
Rolf Sass
Sass Development Company, Inc.

SKETCH APPENDIX

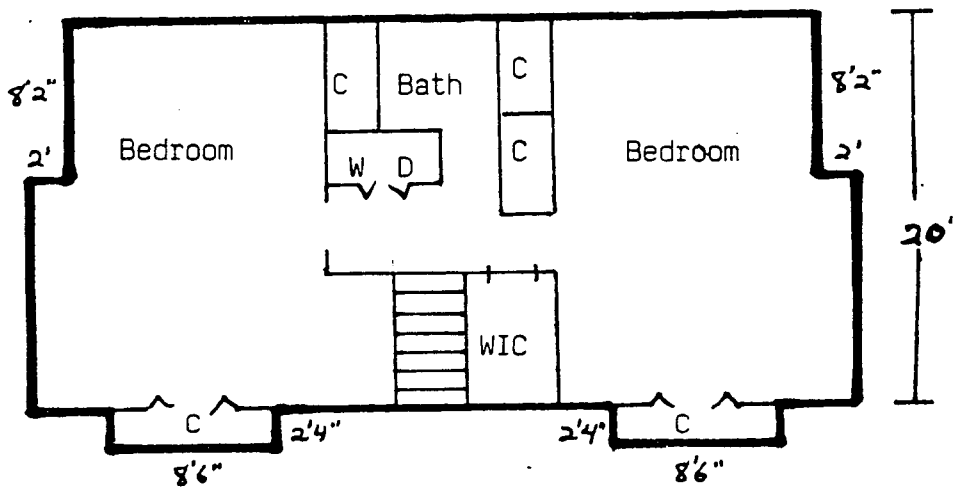
Borrower/Client	Charles and	Ida Pulliam		
Property Address	843 Weaver Dairy Road			
City	Chapel Hill	County	Orange	State NC Zip Code 27514
Lender	State Employees Credit Union			

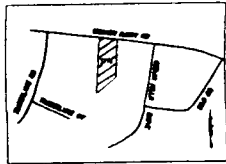
(103)

First Floor

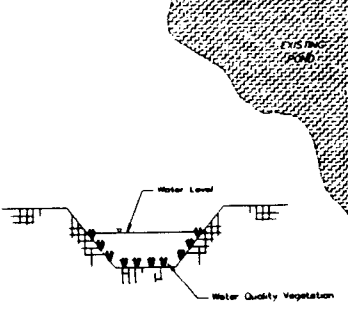


Second Floor



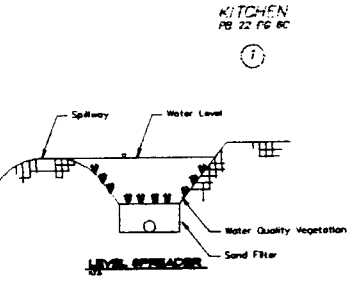


VICINITY MAP
1/17/04



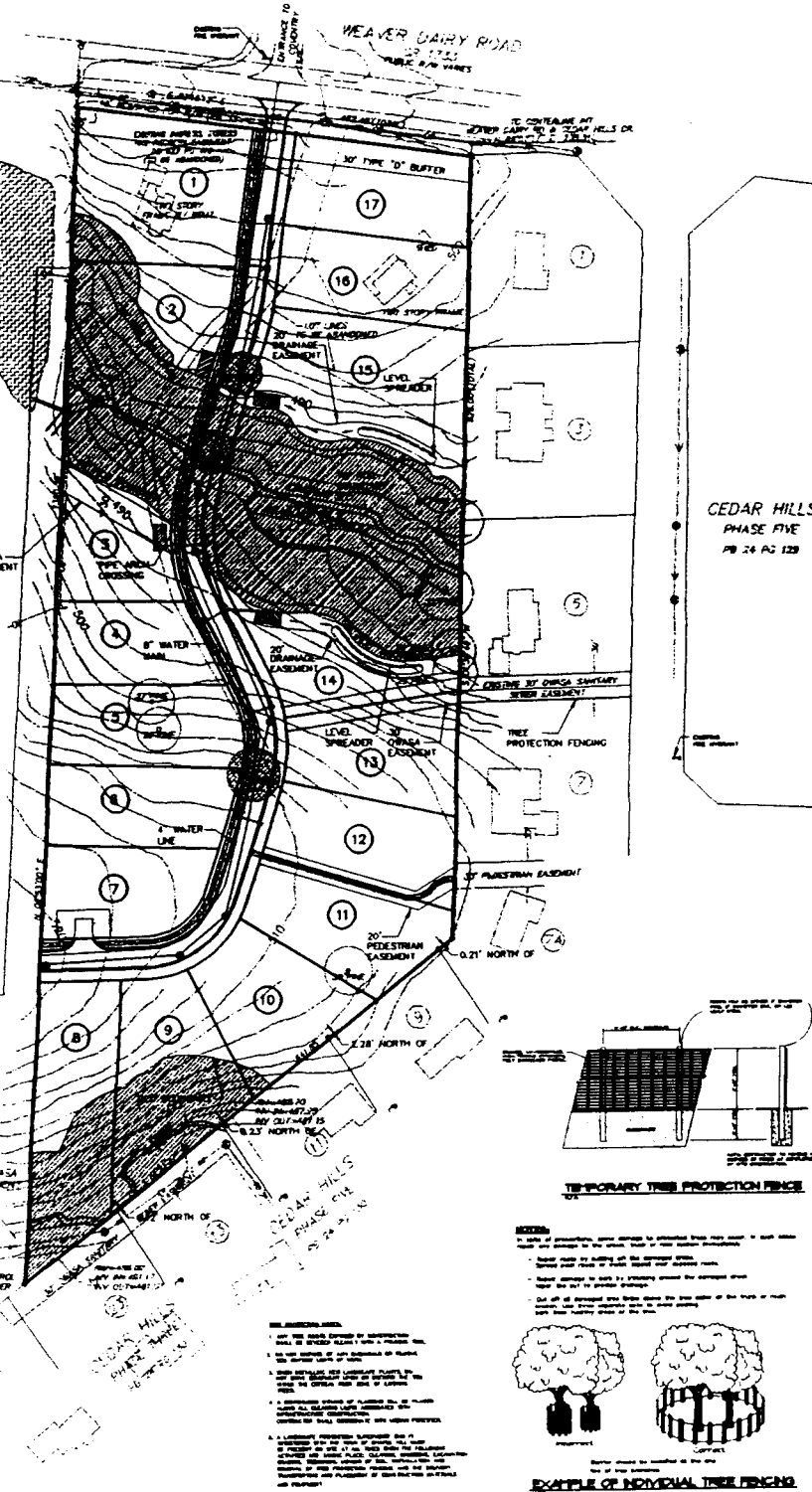
GRASS SWALE

1. Proposed grass swales will act as a buffer zone for the stormwater runoff. The vegetation will reduce stormwater runoff and will act as a sediment trap within the swale.



LEVEL SPREADER

Level spreader will act as a settling basin for stormwater runoff. Level spreader will act as a buffer zone for the stormwater runoff and will act as a sediment trap within the spreader.

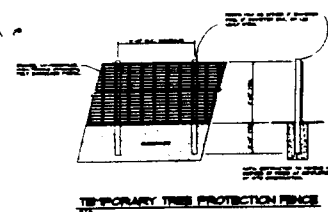
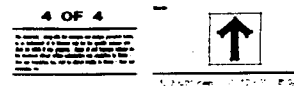


- LEGEND**
- EXISTING TREES TO BE REMOVED
 - EXISTING TREES TO REMAIN W/ TREE FENCING
 - PROPOSED 55 MANHOLE
 - PROPOSED 8\"/> PROPOSED STORMWATER PIPE
 - PROPOSED VEGETATED SWALE
 - PROPOSED 6\"/> PROPOSED E+I WATER MAIN
 - SEDIMENT BASIN
 - CURB INLET
 - PROPOSED FIRE HYDRANT

PROPOSED UTILITY LINES SERVING THIS DEVELOPMENT WILL BE LOCATED UNDERGROUND.

GRADING ACTIVITY SHALL NOT OCCUR WITHIN THE RESOURCE CONSERVATION DISTRICT AREA (SUBSECTION 5.6 OF DEVELOPMENT ORDINANCE) UNLESS GRANTED ADMINISTRATIVE EXEMPTIONS.

Project No.	07-000000
Location	C.H.
Revision	A.S.
Date	December 8, 2003
Scale	1" = 50'



TEMPORARY TREE PROTECTION FENCE

1. All trees to be removed shall be marked with a red 'X' on the ground. 2. All trees to remain shall be marked with a white 'X' on the ground. 3. All trees to be removed shall be removed within 30 days of the start of construction. 4. All trees to remain shall be protected with a temporary tree protection fence. 5. All trees to remain shall be protected with a temporary tree protection fence. 6. All trees to remain shall be protected with a temporary tree protection fence. 7. All trees to remain shall be protected with a temporary tree protection fence. 8. All trees to remain shall be protected with a temporary tree protection fence. 9. All trees to remain shall be protected with a temporary tree protection fence. 10. All trees to remain shall be protected with a temporary tree protection fence.



EXAMPLE OF INDIVIDUAL TREE FENCING

CROSS CREEK

See Development Company, Inc.

PRELIMINARY PLAT
CHAPEL HILL, NORTH CAROLINA

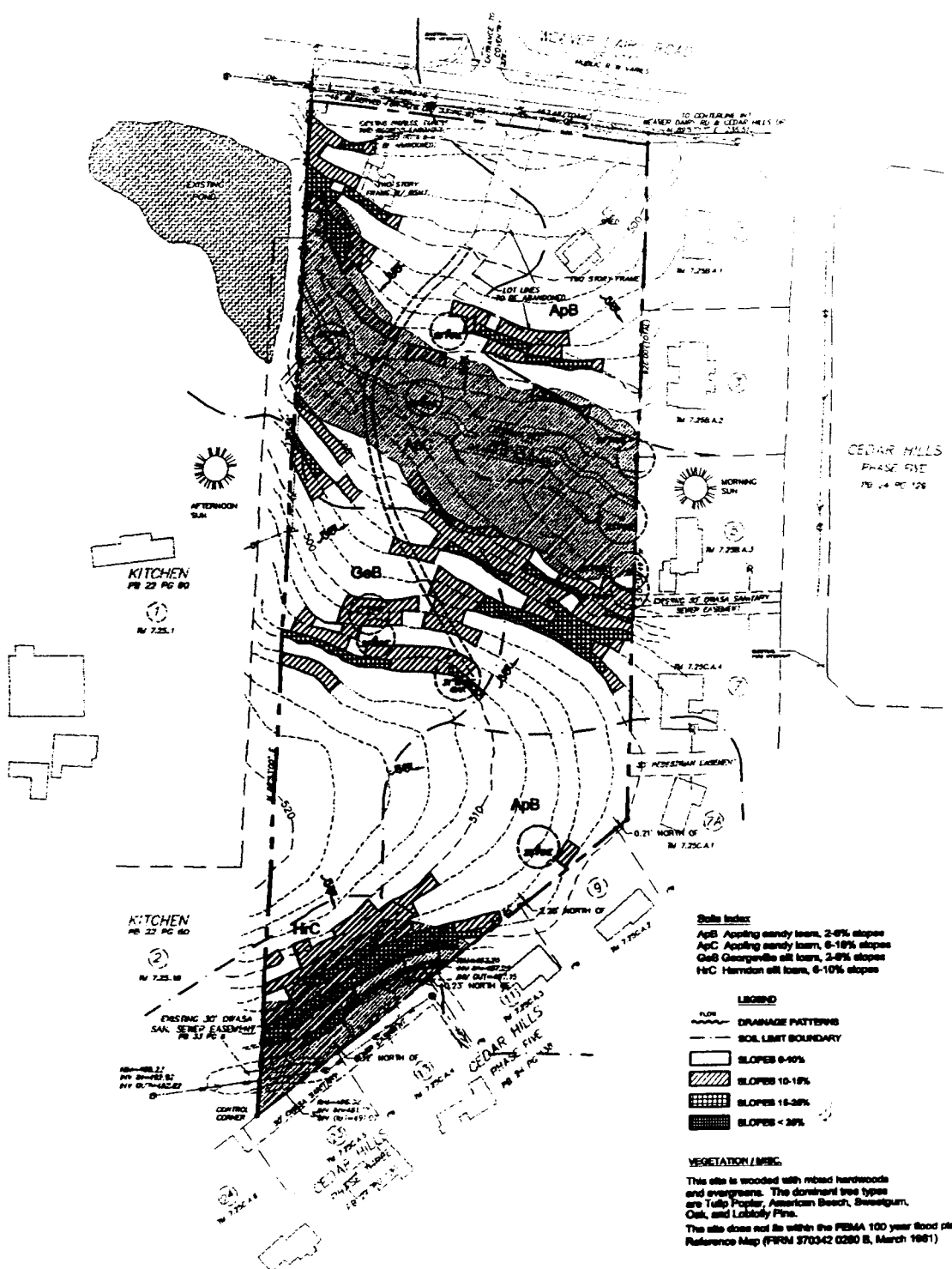
PRELIMINARY UTILITY, DRAINAGE, EROSION CONTROL, AND LANDSCAPE PROTECTION PLAN

Kimley-Horn
and Associates, Inc.

October 11, 2004
April 14, 2005

ALL RIGHTS RESERVED. NO PART OF THIS DOCUMENT MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM KIMLEY-HORN AND ASSOCIATES, INC.

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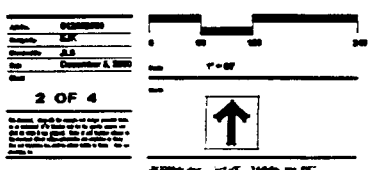
Slope Index:
 ApB Applying erodible loam, 2-6% slopes
 ApC Applying erodible loam, 6-16% slopes
 GoB Good quality all loam, 2-6% slopes
 HcC Hardpan all loam, 6-10% slopes

LEGEND

--- DRAINAGE PATTERNS
 --- SOIL LIMIT BOUNDARY

▨ SLOPES 0-10%
 ▨ SLOPES 10-15%
 ▨ SLOPES 15-20%
 ▨ SLOPES > 20%

VEGETATION / MISC.
 This site is wooded with mixed hardwoods and evergreens. The dominant tree types are Tulip Poplar, American Basswood, Sweetgum, Oak, and Loblolly Pine.
 The site does not lie within the FEMA 100 year flood plain. Reference Map (FROM 370342 0280 B, March 1981)



CROSS CREEK
 See Development Company, Inc.

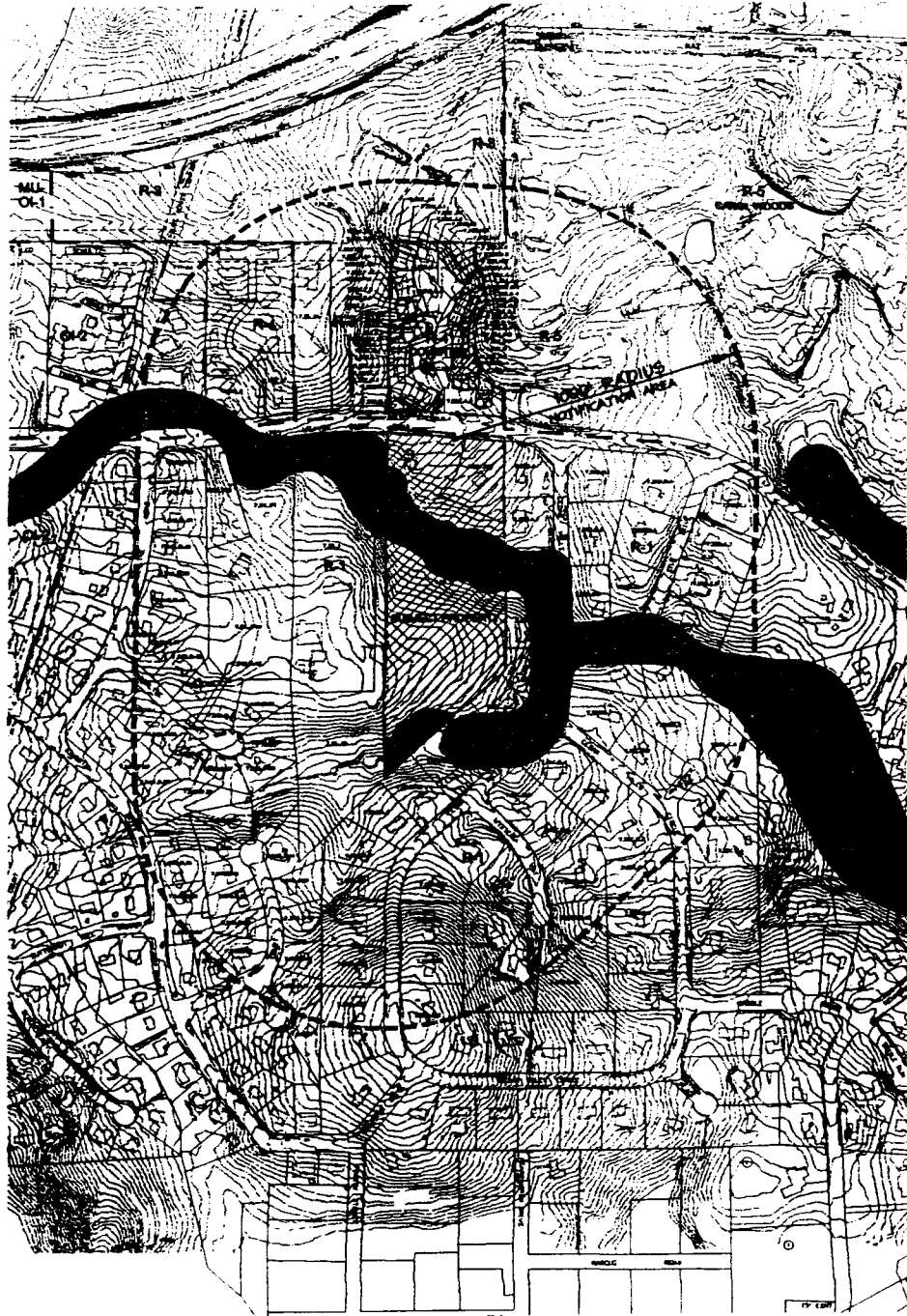
PRELIMINARY PLAT
 CHAPEL HILL, NORTH CAROLINA

SITE ANALYSIS

Kimley-Horn
 and Associates, Inc.

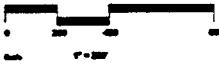
DATE: 11/28/81
 BY: J.H. HORN

2 OF 4



LEGEND
 --- ZONING BOUNDARY
 R-1 ZONING CLASSIFICATION
 --- RCD BOUNDARY

Scale: 1" = 200'
 Date: December 8, 1998



1 OF 4

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CROSS CREEK
 Site Development Company, Inc.

PRELIMINARY PLAT
 CHAPEL HILL, NORTH CAROLINA

AREA MAP

Scale: 1" = 200'
 Date: April 14, 2004



**Kimley-Horn
 and Associates, Inc.**

12,000 SQUARE FEET PER LOT
 1/4 ACRE PER LOT

From: Mia Burroughs [mburroughs@nc.rr.com]
Sent: Wednesday, January 23, 2002 5:40 PM
To: Roger Waldon; Kay Pearlstein; Cal Horton
Subject: Cross Creek Subdivision

Dear Mr. Horton, Mr. Waldon, and Ms. Pearlstein:

As you may know, I live adjacent to the proposed Cross Creek subdivision. Naturally, my husband and I have watched the progress of this development with great interest. We have worked closely with Jack Smyre throughout the process. I am happy to say that he has been attentive to our concerns, particularly about our strong desire that the new development should not cause any additional stormwater runoff. As you may be aware, our property is very vulnerable to flooding, and although the Chapel Hill Public Works Department recently invested funds from the Drainage Assistance Fund to improve the culverts under our driveway, the area still cannot tolerate additional stormwater.

I understand that at this juncture, town staff create a Resolution for consideration by the Council that includes the Manager's recommendations. My purpose today is to encourage you all to include the following in the Resolution:

- Retain the Planning staff's recommendation, approved by the Planning Board, that there be a 30-foot stormwater easement on the edge of the northern section of the RCD. The combined distance of 105 feet certainly meets the EPA's minimum recommendation of 100 feet for a natural stream buffer.
- Include the Transportation Board's recommendation for narrower travel lanes thus reducing impervious surface.
- Opt not to include the Transportation Board's recommendation of an additional sidewalk on the eastern side of the road. The Bicycle and Pedestrian Board seemed to believe that one sidewalk would be sufficient and a second sidewalk will only add unnecessary impervious surface.
- Follow through on or include in the Resolution, as appropriate, the Planning Board's separate vote that asked the Manager to ask the Engineering Department to analyze and, if necessary, fix the culvert running under Cedar Hills Drive before construction commences to improve the drainage through that section of Cedar Fork Creek. Both the applicant and the Town's Stormwater Engineer, Fred Royal, have expressed concern that that culvert is exacerbating the problem.

As always, I thank you for your attention to my concerns.

Sincerely,

Mia Burroughs
110 Cedar Hills Drive
Chapel Hill, NC 27514-1500
919-932-6282

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**Comments to
The Chapel Hill Planning Board
Regarding the Cross Creek Subdivision
Presented by Mia Burroughs
110 Cedar Hills Drive**

January 8, 2002

Thank you for this opportunity to comment on the proposed Cross Creek subdivision. My husband and I have worked closely with the applicant to ensure a good living environment for both the current residents bordering the development as well as those who will live in Cross Creek.

Our property on Cedar Hills Drive borders the proposed subdivision to the east. The bulk of the storm water flowing out of Cross Creek flows through our property via Cedar Fork Creek. This creek is of special note because after it leaves our property it flows to Eastgate via Eastwood Lake. On occasion our house has been surrounded by water on three sides. The Chapel Hill Public Works Department has invested funds from the Drainage Assistance Program to alleviate this situation but the area remains vulnerable to flooding. As a result, we have been working closely with Jack Smyre to ensure that Cross Creek will not cause additional stormwater to flow through our property.

You may have noted that the Planning staff recommends increasing the stormwater easement to 30-feet. We strongly agree with this recommendation. Since this easement will border the 75-foot Resource Conservation District the combined area of 105 feet will reduce the amount of stormwater coming off the property. It will also provide the 100 foot natural buffer recommended by the EPA to adequately filter stormwater to ensure that pollution is removed before it reaches the stream. This design, combined with homeowner's covenants that prohibit tree cutting in the Resource Conservation District, will contribute to stormwater management and clean water preservation.

As such, we strongly encourage Sass Development to include the following covenants for Cross Creek:

- 1) Builders and property owners may not cut down trees (except in the case of a safety hazard) in the Resource Conservation District areas of the subdivision. Tree fencing should be used to ensure that no mistakes are made during construction.
- 2) Builders should leave a minimum 25-foot natural buffer at the eastern property line that borders the Cedar Hills properties. In addition to protecting privacy for Cedar Hills and Cross Creek residents, this buffer will slow stormwater that drains directly onto Cedar Hills properties instead of going down to the creek. Again, tree fencing should be used to ensure that no mistakes are made.

There are four other points that we want to bring to your attention.

- 1) Sass Development has been encouraged by staff to widen the road to town standards or consider an alternative. We encourage the Planning Board to recommend the narrowest possible road that will preserve safety. One reason that Sass Development included a narrow road was to decrease impervious surface. Given the flooding vulnerability of the bordering property, we ask that the Planning Board respect that effort and allow the project to go forward with a road that may be narrower than the town standard.
- 2) In Sass Development's submission, they note that the culvert that runs across Cedar Hills Drive appears to be causing some of the local flooding issues. We ask the Planning Board to recommend that the Town Manager direct the Engineering Department to thoroughly study the issue to determine if in fact the town-approved culvert is a problem and then make recommendations for solving the problem. This should be completed before construction begins upstream. This is particularly critical because in the Town Stormwater Engineer's comments regarding Cross Creek, he wrote that the stormwater

(11)

analysis "underpredicts the various peak discharges." He goes on to write that the peak discharges would be adequate for the road bridge over the creek but he does not comment on whether the underprediction might change analysis of downstream impact. I encourage the Planning Board to request clarification about this.

- 3) The Cross Creek submission includes a paved pedestrian easement. This design has two problems. As the pedestrian easement leaves Cross Creek, it goes onto a property where the house is just feet from the easement and continues directly into a large culvert. Moreover, a paved easement simply adds more impervious surface in an area where there is flooding vulnerability.

I thank you as well as the applicant for listening to these concerns and suggestions. If you have any questions about these comments, I look forward to hearing them.

Kenneth and Charlotte Pearce
36 Cedar Hills Circle
Chapel Hill, NC 27514

(112)

May 23, 2001

Re: Cross Creek Development

Dear Planning Commission:

Our residence is situated at the southeast corner of the parcel of land proposed for the Cross Creek Subdivision. We have lived at this house for over two years. One of the main reasons we chose to live in this neighborhood is the wooded setting where the houses fit into the natural landscape. In this respect, the trees behind our house and our neighbors' houses are certainly an asset. We obviously do not look forward to the disappearance of the trees behind our neighborhood. However, we are not vehemently opposed to development of the land behind our property. In fact, we welcome a smart design that is compatible with existing homes and lots. We believe that if well done, homes on this property would even enhance our neighborhood community. But, we do have some serious concerns about the effects that the proposed development could have on our home and our neighborhood. Particularly, we are concerned about placing 17 homes of "fairly substantial size" on about 10 acres of property. We addressed the commission about our concerns at a public meeting last Fall. The purpose of this letter is to reiterate those concerns.

Drainage. A drainage creek flows through our front yard. This creek meets head on with Cedar Fork Creek in our front yard. Typically we will get two or three floods per year; an example of one of these floods from April of 1999 is attached to this letter. The worst of these floods in our two years of living at this house was the rain that caused the Eastgate flood in August of 2000. During this flood, the bottom section of our yard was completely covered. The culvert under our driveway was completely filled, water spilled over our driveway, and water also crossed an area of Cedar Hills Drive two houses up from us. Water that causes this flooding comes from two upstream watersheds and from the hill behind our house. Practically every hard rain, we lose driveway gravel due to this runoff. Because the entire eastern portion of the Cross Creek property slopes towards our property and our neighbors', we are concerned about the effect that houses, a street and a sidewalk will have on the drainage. We urge that that this issue be considered with the design so that existing flooding problems will not be worsened. Two obvious solutions to the potential problem would be larger lots with less house and/or a large natural vegetation buffer zone behind the eastern houses. Another possible solution to potential flooding problems would be the redesign of the culvert that exists in our yard to better manage the flow of the two creeks that meet at the culvert. Is it possible for the developer to assist in the redesign and installation of a new culvert?

Privacy. Because of the two confluent creeks that run through the front of our property, our house is set near the back of our lot by necessity, not design. Our house is only 30 feet from the back our property. Neighbors on both sides of us also have homes at the back of their lots due to

the two creeks. Our worry is that placing very large houses on roughly one half acre lots behind our houses will greatly affect the privacy for our homes. Further, the land behind us has a gradual upward slope and houses near the middle or back of the proposed lots behind us would be elevated relative to our house and our neighbors'. It would be very desirable to have the Cross Creek homes placed nearer to the front of the proposed lots. Having a large, natural vegetation buffer area between the existing homes and the new Cross Creek homes should greatly enhance privacy conditions at both locations.

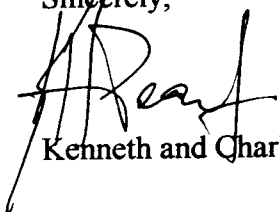

Traffic. Cedar Hills Circle and Drive have experienced an increasing number of cars using these roads as a cut through to Piney Mountain Road. Seventeen new homes at this location will probably add to this traffic as residents and visitors choose to use Piney Mountain as an alternative route to Airport Road. We request that the number of new homes at this development be kept to a minimum to help alleviate traffic. Another suggestion would be to consider making the Cross Creek development road a thru street with connection to the Piney Mountain Road area.

Noise. Traffic noise from Interstate 40 has recently been worsened by development of land between our neighborhood and the interstate. When we first moved in, the noise was noticeable, but really was not a major concern. But now with all the new development and removal of trees, the noise levels have increased. We are concerned that further tree removal and building of large homes will exacerbate the problem for the surrounding neighborhoods of Cedar Hills and Timberlyne.

We look forward to hearing the details of the development plans. We urge that the Planning Commission consider the above points when making recommendations to the developer. We sincerely hope that the development is carried out in a responsible manner so that all adjacent homes benefit.

Thank you for your time and consideration.

Sincerely,

 and 
Kenneth and Charlotte Pearce

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**Comments to
The Chapel Hill Design Commission
Regarding the Cross Creek Subdivision
Presented by Mia Burroughs
110 Cedar Hills Drive**

October 16, 2000

Thank you for this opportunity to provide insight into the natural characteristics of the land that is under consideration. One of the many reasons that my husband and I chose Chapel Hill for our home five years ago is the thoughtful consideration that the town gives to preserving its environment and livability. We look forward to working with the Sass Development Company to ensure a good living environment for both the current residents bordering the development and our new neighbors as they purchase homes in Cross Creek.

The topic I will focus on tonight is drainage. I have developed a particular interest in our town's watercourses over the last five years because Cedar Fork Creek flows through the middle of my property. **Storm water from the Cross Creek Subdivision will flow into Cedar Fork Creek and out through my yard. This creek is of special note because it flows to Eastgate via Lake Forest.** Over the last five years, the Creek has risen to my front steps on at least five occasions. The night of the Eastgate flood last summer, our house was surrounded by water on three sides. Cedar Fork Creek overflowed its banks well back in the Cross Creek wetlands area and flowed at a width of approximately 80 feet directly into my back yard. When I mention "high tide" later that situation is what I have in mind.

We have had the good fortune of working with the City of Chapel Hill to try to alleviate this problem. Just this month, the Public Works Department has used funds from the Drainage Assistance Program to increase the carrying capacity of our culverts to reduce the odds of the flow reaching our steps. I must note, however, that on different occasions two of the city's engineers have cautioned me that this fix may not work. Only time will tell.

That said, my key point tonight is that Cross Creek should be designed so that there will be no increase in the stormwater flow leaving the development. I would like to make some suggestions to that end to both the Sass Development Company and the Design Commission.

The Town of Chapel Hill Engineering Department recently created a position for a Stormwater Management Engineer. The Engineering Department will be working with the State to create flood maps for many areas of Chapel Hill including the part of Cedar Fork Creek that we are now considering. This new information will be vital for effective drainage planning for Cross Creek. **I would strongly encourage Sass Development Company and the Design Commission to consult with the Town's Engineering Department as soon as possible.** For obvious reasons, the Department is very focused on drainage that has an impact on Eastgate and will likely have some creative suggestions for an optimal drainage plan for Cross Creek.

Topics that should be discussed with the Engineering Department include but are certainly not limited to the following:

- 1) **The Resource Conservation District areas appear to be measured incorrectly.** Cedar Fork Creek forms wetlands by splitting and meandering in at least one section to a spread of at least 40 feet. The concept plan measures the RCD from the northern branch but does not take the southern branch into account. It certainly does not account for the "high tide" width that it can attain most recently during the Eastgate flood.

Additionally, the width of the RCD is determined by the area drained by the stream. The Concept Plan appears to allow only the minimal width of the RCD. I understand that

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there can be a difference of opinion as to how to determine the required width. I recommend that Stormwater Management Engineer be consulted on this question.

- 2) While the road bisecting Cedar Fork Creek will block runoff initially on the west side of the development, the water will run into the creek and then pass under a bridge. The area west of the bridge would be ideal for a **retention pond** designed to slow the increased run-off from the western side of Cross Creek. Perhaps road runoff could be directed toward such a pond.
- 3) Vegetation absorbs water flow and pollutants before they seep into the water supply. While the developer will have to cut down a significant number of trees in the process of making room for the new homes, **a covenant that prohibits builders from clear-cutting would be the best way to soften the impact of the development.**
- 4) The RCD Ordinance requires that "a natural vegetative buffer at least fifty feet wide from either bank of the channel shall be retained." Theoretically, the other portion of the RCD could be used for lawns or other cleared areas. It my hope that **when all the houses are built and this project is complete, that a covenant will require that the full RCD area remain in a natural vegetative state.** The two covenants I propose would be easier to adhere to if the lot sizes were increased to more than the current ½ acre target.

I thank both Sass Development and the Design Commission for listening to these concerns and suggestions. If you have any questions about these comments, I look forward to hearing them.

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Comments to
The Chapel Hill Design Commission
Regarding the Cross Creek Subdivision
Presented by Deanna Larus
106 Cedar Hills Drive
October 16, 2000

Thank you for the opportunity to address this commission. I plan on keeping my comments brief and focusing on some inaccuracies that our neighborhood has noted in the survey map drawing for this subdivision.

One of the most prominent features of this property is the RCD land that is just north of the developable land. The Developer's Program and Statement of Compliance filed with your commission discuss this area in great detail. The concept plan that was filed with this statement shows an OWASA sewer easement intersecting this land on the property line between our house and our neighbor's to the south (110 Cedar Hills Drive). This easement is not shown on the survey that was done when I purchased my house or on one done several years later when I added an addition to my property. It is also not shown on my neighbor's survey.

The second inaccuracy that I wish to note is how the northern stream is displayed on the map. From this map it appears that there is a single stream that bisects the property East to West. This is not correct. While there is a primary streambed that does flow from the Kitchen property there are numerous other small streams that flow South from the developable land and North from Weaver Dairy Road. As I found out when the foundation of our addition was dug, some of these streams are underground.

As you have already heard from my neighbors, there is a concern about the water drainage issues of this property. On numerous occasions the small stream that on the South side of my property has been overrun with runoff from the Cross Creek property and has flooded both my property and that of my neighbors. This development of Cross Creek must be carefully planned and developed with consideration to both the RCD boundary issues and how the increased runoff will affect the extensive system of streams that cut across the lower portion of this land. A first step in this planning is an accurately drawn concept plan.

I wish to emphasize that we are looking forward to working with the Sass development company to ensure that the Cross Creek development is compatible with the existing neighborhoods. I point out these errors tonight not to hinder their development plans, but rather to encourage them to enter into a discussion with the existing neighbors. Many of us have lived next to this land for a number of years and have seen it go from the quiet woods and gentle streams depicted in the development plan to a flooded river carrying water to ~~Bolin Creek~~. We would like to share this knowledge with the developer to ensure that Cross Creek is a development that is compatible with the Cedar Hills neighborhood in both good weather and bad.

Eastwood
Lake

(118)

Neil & Setsuko Hoffman
115 Silo Drive
Chapel Hill, NC 27514

Tel: 919-967-1473

October 16, 2000

Planning Department
Attn: Mr. Rob Wilson
Town of Chapel Hill
306 N. Columbia Street
Chapel Hill, NC 27516

Dear Mr. Wilson,

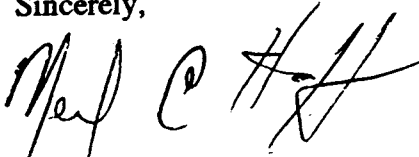
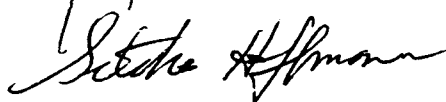
Re: Cross Creek Subdivision – Concept Plan Review (File No. 25.2)

We appreciate the opportunity to provide the Planning Department with our concern regarding the Cross Creek Subdivision concept plan.

The Cedar Fork Creek runs through our property (115 Silo Drive) and Drs. Frank & Ann DeRuyter's property at 19 Silo Drive. As the attached letter that was submitted to you by Dr. DeRuyter on 10/10/00 indicates, we are also concerned about the recent years' significant increase in the amount of water flow and subsequent soil erosion surrounding the creek at our property. We ask you to examine the potential overflow and accelerated erosion of Cedar Fork Creek as a result of the proposed Cross Creek development and any future upstream development plans. We ask that you ensure that the developer(s) of the Cross Creek and any future development plans surrounding the Cedar Creek will take a proactive measure to prevent a flooding disaster along the residences of the Cedar Fork Creek.

If you need further input from us, please let us know. Thank you again for your consideration on this matter.

Sincerely,

Attach.

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10 October 2000

PLANNING DEPARTMENT

ATTN: Mr. Rob Wilson

Town of Chapel Hill
306 N. Columbia Street
Chapel Hill, NC 27516

RE: CROSS CREEK SUBDIVISION
Concept Plan Review (File No. 25..2)

Dear Mr. Wilson,

I appreciate the opportunity to provide input into the above referenced Concept Plan Review. I am addressing concerns as the homeowner at 19 Silo Drive on a downstream portion of Cedar Fork Creek that meanders through my entire front and side yards.

Over the 4 years that I have lived at this address, there has been a significant increase in the amount of water flow and subsequent soil erosion surrounding the creek. Approximately 2 years ago, the Town of Chapel Hill Engineering Department had to build a 3-foot embankment in my front yard to prevent the creek from overflowing as it had begun to continually flood causing serious erosion to my property. In addition to the work by the Town, I had to hire a private contractor, at significant personal expense, to build up and reinforce the embankment along my side yard because of flooding and erosion. I was required to do this because the Town indicated that the creek running along my side yard was beyond its jurisdiction. Next month, the Engineering Department is scheduled to return and build an even larger embankment in my front yard due to renewed flooding over the past year resulting from increased water flow through the creek.

I am greatly concerned about the impact the proposed development and any future upstream developments will have on the water flow and erosion along my property and downstream portions of Cedar Fork Creek. I draw your attention to 3 recent events to further illustrate my concern. These directly affect my property, not to mention the safety of my family. First, there is now a 15-foot section of my neighbors sewer line that crosses the creek into the main sewer line, which runs through my property, that has become fully exposed due to all of the erosion. Continued heavy water flow will cause this sewer line to rupture resulting in sewer spillage into the creek. As this will happen during heavy creek flow, it is unlikely to be detected for several days. The impact of this is obvious. Second, during the storm this past July, a section of the creek overflowed along my side yard where the embankment is over 6 feet high. This has never occurred previously. Third, several large trees in the past have been uprooted due to the continued erosion. Currently there are 8 large trees that now have roots exposed and are in danger of being uprooted in the near future. These three events are directly related to increased water flow in Cedar Fork Creek, which can only be attributable to the increased runoff associated with all of the new construction occurring upstream.

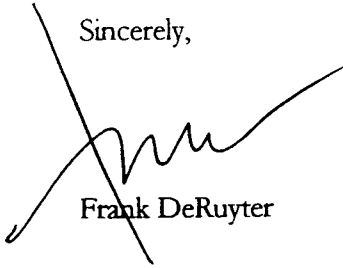
FRANK & ANN DERUYTER • 19 SILO DRIVE • CHAPEL HILL, NC 27514

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Failure to take into consideration the impact that this proposed development would have on water flow into Cedar Fork Creek would be a serious and negligent oversight by both the Planning Department and the Design Commission. I urge you to address this issue as it relates to this proposed development and any future developments upstream from my property and other properties along Cedar Fork Creek.

If I may provide any additional information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Frank DeRuyter', is written over a diagonal line that crosses the signature from the top left to the bottom right.

Frank DeRuyter

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Kenneth and Charlotte Pearce
36 Cedar Hills Circle
Chapel Hill, NC 27514

May 23, 2001

Re: Cross Creek Development

Dear Planning Commission:

Our residence is situated at the southeast corner of the parcel of land proposed for the Cross Creek Subdivision. We have lived at this house for over two years. One of the main reasons we chose to live in this neighborhood is the wooded setting where the houses fit into the natural landscape. In this respect, the trees behind our house and our neighbors' houses are certainly an asset. We obviously do not look forward to the disappearance of the trees behind our neighborhood. However, we are not vehemently opposed to development of the land behind our property. In fact, we welcome a smart design that is compatible with existing homes and lots. We believe that if well done, homes on this property would even enhance our neighborhood community. But, we do have some serious concerns about the effects that the proposed development could have on our home and our neighborhood. Particularly, we are concerned about placing 17 homes of "fairly substantial size" on about 10 acres of property. We addressed the commission about our concerns at a public meeting last Fall. The purpose of this letter is to reiterate those concerns.

Drainage. A drainage creek flows through our front yard. This creek meets head on with Cedar Fork Creek in our front yard. Typically we will get two or three floods per year; an example of one of these floods from April of 1999 is attached to this letter. The worst of these floods in our two years of living at this house was the rain that caused the Eastgate flood in August of 2000. During this flood, the bottom section of our yard was completely covered. The culvert under our driveway was completely filled, water spilled over our driveway, and water also crossed an area of Cedar Hills Drive two houses up from us. Water that causes this flooding comes from two upstream watersheds and from the hill behind our house. Practically every hard rain, we lose driveway gravel due to this runoff. Because the entire eastern portion of the Cross Creek property slopes towards our property and our neighbors', we are concerned about the effect that houses, a street and a sidewalk will have on the drainage. We urge that that this issue be considered with the design so that existing flooding problems will not be worsened. Two obvious solutions to the potential problem would be larger lots with less house and/or a large natural vegetation buffer zone behind the eastern houses. Another possible solution to potential flooding problems would be the redesign of the culvert that exists in our yard to better manage the flow of the two creeks that meet at the culvert. Is it possible for the developer to assist in the redesign and installation of a new culvert?

Privacy. Because of the two confluent creeks that run through the front of our property, our house is set near the back of our lot by necessity, not design. Our house is only 30 feet from the back our property. Neighbors on both sides of us also have homes at the back of their lots due to

the two creeks. Our worry is that placing very large houses on roughly one half acre lots behind our houses will greatly affect the privacy for our homes. Further, the land behind us has a gradual upward slope and houses near the middle or back of the proposed lots behind us would be elevated relative to our house and our neighbors'. It would be very desirable to have the Cross Creek homes placed nearer to the front of the proposed lots. Having a large, natural vegetation buffer area between the existing homes and the new Cross Creek homes should greatly enhance privacy conditions at both locations.

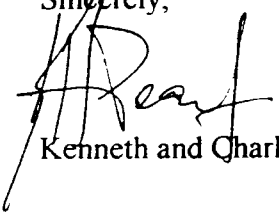

Traffic. Cedar Hills Circle and Drive have experienced an increasing number of cars using these roads as a cut through to Piney Mountain Road. Seventeen new homes at this location will probably add to this traffic as residents and visitors choose to use Piney Mountain as an alternative route to Airport Road. We request that the number of new homes at this development be kept to a minimum to help alleviate traffic. Another suggestion would be to consider making the Cross Creek development road a thru street with connection to the Piney Mountain Road area.

Noise. Traffic noise from Interstate 40 has recently been worsened by development of land between our neighborhood and the interstate. When we first moved in, the noise was noticeable, but really was not a major concern. But now with all the new development and removal of trees, the noise levels have increased. We are concerned that further tree removal and building of large homes will exacerbate the problem for the surrounding neighborhoods of Cedar Hills and Timberlyne.

We look forward to hearing the details of the development plans. We urge that the Planning Commission consider the above points when making recommendations to the developer. We sincerely hope that the development is carried out in a responsible manner so that all adjacent homes benefit.

Thank you for your time and consideration.

Sincerely,

 and 
Kenneth and Charlotte Pearce