



The Residences at Chapel Hill North

Ephemeral Stream Statement of Necessity for Disturbance

The 12.97-acre Chapel Hill North site, on which Crosland Inc. proposes to develop a rental residential community, was examined in 2003 by Town of Chapel Hill staff to determine what streams, if any, are located on the site.

The Town of Chapel Hill defines three types of streams for classification.

Two stream types have Resource Conservation District (RCD) buffer areas. These are:

- I. ***Perennial streams*** which, with the rare exception of long periods of drought, have continuously flowing streams of water. Many times these are spring feed streams.
- II. ***Intermittent streams*** which generally have a flow of water except during dry summer months and of course

The third stream type is **Ephemeral** and it conveys water only during and immediately after rain events. The LUMO definition of Ephemeral is shown below:

Ephemeral Stream Definition

"A feature that carries only stormwater in direct response to precipitation with water flowing only during and shortly after large precipitation events. An ephemeral stream may or may not have a well-defined channel, the aquatic bed is always above the water table, and stormwater runoff is the primary source of water. An ephemeral stream typically lacks the biological, hydrological, and physical characteristics commonly associated with the continuous conveyance of water."

Ephemeral streams are explicitly exempted from RCD buffer requirements. The following statements from the LUMO establish this exemption and the standard permitting disturbance of an ephemeral stream channel.

"Section 3.6.3(c) Resource Conservation District Stream Corridors

The presence of an Ephemeral Stream as Defined in Appendix A does not place the underlying and nearby land within the Resource Conservation District. Restrictions associated with Ephemeral Streams are contained in Section 5.4."

"Section 5.4.6 General Performance Criteria for Stormwater Management

(d) Land disturbance with the stream channel of any ephemeral stream shall be minimized, and prohibited unless explicitly authorized by issuance of a Zoning Compliance Permit after demonstration of the necessity for the disturbance."

The Residences at Chapel Hill North

Stream Determinations for Crosland Inc. Site

The 2003 Stream Determination by Town Staff determined that there are no Perennial or Intermittent streams on the site, but that an ephemeral channel did exist in the southwest portion of the site. The support material for this determination has been previously submitted as part of the SUP application.

To identify more specifically the location and scope of the ephemeral stream and determine if wetlands exist, ATC Associates of North Carolina, PC conducted a field investigation. ATC determined that an ephemeral channel meeting the Town of Chapel Hill LUMO definition of about 120 feet in length exists in the southwest corner of the site. The channel is not classified as ephemeral under either NC State or Army Corps of Engineers definitions. The Army Corps of Engineers has also determined that no wetlands exist. A copy of the most recent correspondence from ATC regarding these matters is attached to this statement.

Statement of Necessity for Disturbance

In 1989-90 the Chapel Hill North Master Plan established the public roadway patterns and points of internal access to the properties in Chapel Hill North. At that time, the Chapel Hill stream definitions did not include "Ephemeral" streams.

Access to the Crosland Inc. site was firmly established in the Phase I Special Use Permit (1991).

The site entry from Perkins Road for The Residences at Chapel Hill North is located in the southwest corner of the property. It is designed to permit full access to the proposed residential development and the service areas at the rear of the existing retail uses in Chapel Hill North. In addition to the primary roundabout entrance to The Residences at Chapel Hill North, a secondary access for emergency vehicles, service vehicles, and US Postal Service access and a community mail facility has been designed.

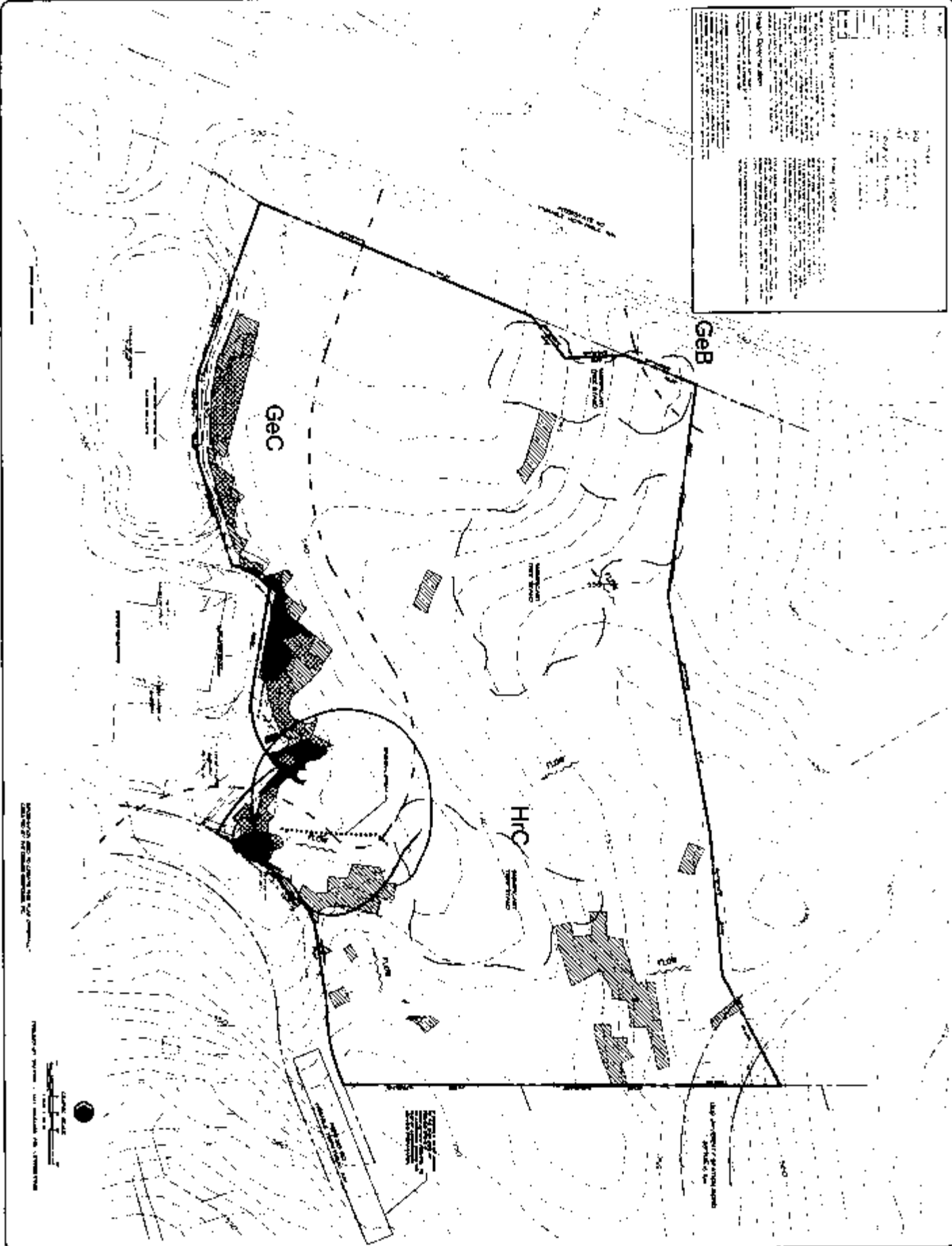
The design and location of this "secondary drive" permits two stands of significant existing trees located south of and east of the ephemeral stream to be retained and help establish a strong visual area of existing vegetation as seen from Perkins Road.

Disturbing the short length of ephemeral stream channel is in fact a choice between two goals held by the Town: 1) Protection of existing vegetation and 2) limiting disturbance of Ephemeral channels.

During the 4 concept plan review meetings for this application (2 at the CDC and 2 at the Town Council) the applicant was strongly encouraged to save the significant tree stands and incorporate them into the design of the site.

For the above cited reasons, and within the LUMO standards which do permit disturbance of ephemeral streams when necessary, the applicant believes that the roadway access conditions established 15 years ago and the strongly stated preference by elected and appointed Town Boards for tree preservation satisfy the "necessity" requirement for disturbance of the short (120 feet in length) ephemeral stream.

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Notes 1. All areas shown on this map are subject to the final engineering plan. 2. The proposed road layout is shown in dashed lines. 3. The proposed building footprints are shown in solid lines. 4. The proposed parking areas are shown in hatched areas. 5. The proposed utility lines are shown in dotted lines. 6. The proposed site is shown in a solid line. 7. The proposed site is shown in a solid line. 8. The proposed site is shown in a solid line. 9. The proposed site is shown in a solid line. 10. The proposed site is shown in a solid line.	



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BY	JRM
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PROJECT NO.	1000000000
DRAWING NO.	1000000000
SHEET NO.	1000000000
TOTAL SHEETS	1000000000

**RESIDENTIAL COMPONENT
OF CHAPEL HILL NORTH**

CHAPEL HILL, NORTH CAROLINA

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SITE ANALYSIS

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 200 W. HICKORY ST., SUITE 100
 COLUMBUS, NC 28728

**THE JOHN R. MCADAMS
COMPANY, INC.**
 1000 W. HICKORY ST., SUITE 100
 COLUMBUS, NC 28728
 (704) 326-1000

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