

Think Quality - Think Future

Blount County Planning Department

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MEMORANDUM

TO: Members of the Blount County Planning Commission

FROM: Planning Department (Tel. 273-5750)

DATE: May 15, 2009

SUBJECT: Staff reports on items to be added for the Thursday May 28th 2009 regular meeting. 5:30 Hearings

Hearings:

- A. Concept Plans: None
- B. Preliminary Plats – Major Subdivisions
- 1. **Sharondel Estates off Morganton Road by Ratledge and Ivens: 61 lots off the existing county roads and off proposed new county roads.**

Renewal of preliminary plat. The preliminary plat was approved at the July 2006 regular meeting. Since that time some of the site work and utility work has been initiated. The bulk of the road work that has occurred and drainage structures that have been exposed to the elements will require repair prior to commencing the remainder of construction.

The currency of the preliminary plat has expired. Prior to beginning work again and preparing for a Phase 1 final plat the owner is requesting the preliminary plat be approved with the same stipulations and outstanding items to be completed as before to allow for the plat to be current. The owner shall also have to have a new pre-construction meeting with staff and address the items specified in a Highway Department letter dated November 17, 2007 in addition to other corrective measures that are listed at the end of the staff analysis.

The owner has advised that his state erosion control permit is valid until 2010. The previous preliminary plat was also subject to a grading permit from the County Storm Water Coordinator. That grading permit has expired. In the

meantime, the County Commission took action to limit applicability of the grading permit requirement to the urbanized areas of the county, which does not include the present development. The Planning Commission may wish to consider how and under what circumstances the Storm Water Department can continue involvement in this ongoing development to address erosion control measures.

Background: The proposed Sharondel Estates is a 49 acre parcel containing 61 proposed new lots to be served by a new county road section off of Longview Road within the Longview Farm Subdivision off of Morganton Road. The proponents have indicated that five lots shall front Morganton Road (Lots 57-61) and three of those lots (58-60) shall be served by a common driveway off Morganton Road. The parcel is gently rolling pasture land and is void of any farming activity.

The proposed lot 57 shall have driveway access only off of Longview Road and not off of Morganton Road. Lot 61 shall have restricted driveway access at the Western most portion of the proposed lot along the Ragain boundary line.

Adequate sight distance can be accommodated at the crest of the vertical curve on Morganton Road located near the center of lot 59.

Due to soil constraints the developer intends to construct a sewer system to be owned and operated by a public utility to serve all of the lots shown. The preliminary plat indicates the proposed location for the sanitary on-site sewer system including the location of the sand filter and related equipment and drip field lines.

According the project engineer none of the parcel is located within a floodplain. All of the proposed lots are to be served by public water and underground electric. An impact assessment was supplied for this proposed development as required.

Analysis:

Design of plat, plat description:

The parcel is located within the R-1 zone and the proposed density is appropriate as all of the lots are greater than 30,000 square feet. Due to marginal soils on most of the parcel, the developers have opted to utilize an on-site, public utility, sanitary sewer system to serve all of the lots.

The parcel is gently sloping to moderately sloping terrain and all of the drainage will be directed towards the existing drainage swales located on the front and another on the rear of the parcel. There is a wide undefined low area towards Morganton Road and a wet weather conveyance along the rear boundary of the property. Additionally some of the drainage will be directed towards neighboring

parcels due the topography of the overall site. A drainage plan with drainage easement on the property has been supplied. These drainage features/common areas shall become the responsibility of the property owners association to maintain.

The proposed preliminary plat has been submitted with preliminary sewer information. The overall design is satisfactory and is in general conformity with the subdivision regulations. The proposed subdivision has been reviewed inclusive of the subdivision regulations for small lots along public roads with public water, underground electric and sanitary sewer.

Existing County Road(s):

All of the road improvements for Longview Road have been completed with the Longview Farms Subdivision. The Highway Department has indicated that Longview Road and drainage facilities within the right-of-way are under the maintenance of the county. The Highway Department reports that Longview Road is an existing 22' wide county road between the curbs and Morganton Road is 19' wide with substantial shoulders and both are adequate for the addition of these lots.

County Schools:

The school criteria was reported in the original preliminary plat approval in 2006. This section is no longer required as a stipulation or criteria for preliminary plat consideration.

Septic, Sanitary Sewer:

Lots 1-61 of Sharondel Estates are all to be served by an on-site sewer system. Staff has confirmation that this system will be owned, maintained and operated by Tennessee Wastewater Systems, Incorporated (TWSI) which is a public utility. A letter has been supplied by TWSI confirming that TWSI will own and operate the sewer system. In addition, a letter has been supplied confirming that the developers have contracted for sewer design services. Prior to the pre-construction meeting with staff, TWSI shall certify that a contract is in place and that funding has been secured to ensure the completion of the on-site sewer system.

TWSI shall also supply a copy of their "Approval For A Certificate of Public Convenience and Necessity" to operate as a public sewer provider for this proposed development (Tennessee Regulatory Authority docket number to be supplied to staff when approved).

The State of Tennessee will have to approve the wastewater collection system plan and the actual construction of the facility. Mr. Hines of TWSI (Vice

President, Sewer System Manager) shall certify the installation, operation, maintenance and ownership of the sewer system to serve these lots on any and all final plats for Sharondel Estates. An area shall be identified on the preliminary plat for use by the public sewer utility and that area shall identify the ownership of the area to contain the on-site sewer system and drip fields.

Particular attention to erosion control measures during construction of the Sanitary Sewer System shall be required. *Any construction activity, earth moving, or grading that occurs prior to a pre-construction meeting with staff for the Wastewater Collection System is solely at the risk of the developer. Any state and county permits required for the construction of this facility shall be supplied to staff at the time of the construction meeting.*

In it is the responsibility of the developer and sewer utility to determine whether a Storm Water Pollution Prevention Plan (SWPPP) permit from the State of Tennessee may be required or any other applicable state permits for grading and clearing prior to commencing construction of the on-site sewer system, service lines and drip field areas. A copy of any applicable SWPPP shall be supplied prior to or at the time of the pre-construction meeting with planning and engineering staff.

The TWSI On-site Sewer System Manager shall certify that a contract and funding has been secured for the installation, maintenance, operation and ownership of the sewer system to serve these lots.

TWSI shall supply copies of the request and approval from the Tennessee Regulatory Authority (TRA) to amend their Certificate of Convenience and expand their service area to include Sharondel Estates Subdivision. In addition, a copy of the Tennessee Department of Conservation (TDEC) approval letter for the proposed waste water system to serve Sharondel Estates Subdivision shall be submitted along with a copy of the State Operating Permit (SOP) and a copy of the approved and stamped wastewater collection, treatment and reuse plan.

Notice prior to construction for the On-site Wastewater Collection System:

- Construction of the wastewater system including any necessary ARAP, NPDES, or SWPPP permits is the responsibility of TWSI and the developer. Contact the Tennessee Department of Environment and Conservation at 594-6035 for determination and application of any required permits.
- All erosion control measures shall be in place prior to any on-site construction and in compliance with the state approved engineering plans as well.
- Prior to any on-site construction the developer and TWSI shall contact the Blount County Highway Department at 982-4652 regarding road construction and any utility construction to be done within the public right-of-way.

- It is also the responsibility of the developer and TWSI to contact Tennessee One-Call to verify the locations of all utilities at least 72 hours prior to any construction at 1-800-351-1111.
- Any potential additional lots from the previous Longview Farm Subdivision that may be connected to the approved system after completion are at the discretion of the public utility and all operating permits and improvements are the responsibility of TWSI to comply with.
- The developer shall contact the Blount County Engineering Department at 984-3421 to schedule a pre-construction meeting and to receive instructions on what contractors and project personnel should be present at this meeting. All permits shall be supplied prior to scheduling this meeting with County Staff.

Drainage and Erosion Controls:

Any construction activity, earth moving, or grading that occurs prior to a pre-construction meeting with staff is solely at the risk of the developer. All required erosion control permits shall be supplied to staff prior to the pre-construction meeting.

In it is the developer's responsibility to keep current a Storm Water Pollution Prevention Plan (SWPPP) permit from the State of Tennessee or any other applicable state permits for grading and clearing prior to commencing any more construction for the roads, drainage facilities and on-site sewer system for Sharondel Estates.

The project engineer supplied a drainage plan and calculations as required for preliminary plat submission however the overall drainage plan may require modifications that shall require an updated drainage plan be supplied. Staff understands that once an actual on-site wastewater collection system is designed for the proposed subdivision that the actual lot design may be modified. Additional lots may be indicated on a revised plan towards the front of the parcel and additional space may be required near the upper drainage area for the drip field lines. Staff further understands that while the intent is not to modify the road design, the overall lot design is subject to change.

The developer shall supply a letter from the State of Tennessee, Department of Environment and Conservation, Ground Water Division that the closed depression can be used as a drainage facility prior to the pre-construction meeting. Any changes in the overall drainage plan may also need to changes in lot design.

All of the road drainage culverts, tiles, ditches and detention facilities shall be constructed for any proposed future phased development for Sharondel Estates. The project engineer will be required to certify that the detention facilities for Sharondel Estates have been built in accordance with the project engineering plans and specifications.

All drainage facilities contained outside of the proposed right-of-way(s) shall become the maintenance responsibility of a property owner's association for Sharondel Estates. Adequate building sites for each lot must avoid drainage swales and the closed depression shown on the preliminary plat.

Proposed Road Plan:

A road plan with profiles, cross section and proposed road layouts and road drainage facilities have been submitted for Sharondel Estates. The road plan indicates a loop road design to accommodate the bulk of the lots shown. The number of lots is appropriate for the loop road design off of the existing county road, Longview Road.

The proposed road sections indicated on this plat do not exceed 13% grade and the road design does not require any variances to the regulations. The road plan indicates proposed new county roads to be constructed 24-feet wide between the curbs to accommodate all of the internal lots and built to country road and drainage standards.

The common driveway easement with entry at the crest of Morganton Road on lot 59 must be fully installed to serve lots 58, 59, and 60 within the easement shown on the preliminary plat. Lots 58, 59, and 60 will be restricted from any other driveway cuts into Morganton Road.

The common drive shall be built on a compacted earth surface void of substandard soil condition in the sub-grade. The entire common driveway shall be constructed on a prepared crowned base. The slope and transition back to the natural grade must also be smooth and not excessively steep. A common driveway that enters along Morganton road will also require a paved entrance.

Any fill sections must be rolled in with a sheep's-foot to ensure adequate compaction rates prior to stone surface. The graded surface shall be a prepared crowned surface a minimum of 16 feet wide between ditches on both sides of the driveway. The gravel surface application shall be spread a minimum of 2 inches thick the entire length of the common driveway and on the turn-around and be a minimum of 10 feet wide (five feet on either side of crown in sub-grade). The three foot shoulders on both sides of the 10 foot wide gravel surface shall also be compacted and seeded and covered in straw as soon as the stone surface is applied. Any drainage considerations shall be designed and sized by the project engineer.

Public Water and Electric Utilities:

Public water and underground electric are proposed to serve all of the lots. All water and electric improvements shall be fully installed to each lot prior to final plat or a surety posted to the appropriate utility prior to final plat. Written verification that a surety has been posted or the extension of services has been accommodated from the individual utilities prior to any phased final plats.

Property Owner's Association:

The developer shall supply a copy of a Property Owner's Association for Sharondel Estates for the maintenance responsibility for the drainage facilities and other common elements for staff review prior to any final plat submission.

Construction of Improvements:

As of this time there has been some construction of improvements on site. The preliminary plat must be modified to reflect the exact location of the Wastewater collection system in its entirety including the location of the drip field line area(s) as well as any modifications to the proposed roads, drainage facilities, and the location of a common driveway to serve the lots along Morganton Road.

The proposed new road shall be built according to the project engineering plans and according to county road standards. Both water and electric shall be completely installed to serve these lots prior to final plat for any lots and to avoid unnecessary disturbance to the roadway after completed. Should a surety be posted for the electric and water utility prior to final plat, certification of said surety shall be required in addition to insuring that conduit has been installed for all road crossings prior to binder surface paving.

The developer shall contact the Highway Department to schedule a pre-construction meeting prior to any on-site construction for Sharondel Estates. County Engineering Department staff has reviewed the profiles, road plan, calculations and drainage plan submitted for the proposed Sharondel Estates as shown. The comments of the Highway Department are included in this staff analysis. Any and all modifications to roads, drainage and lot design shall be supplied to staff with an updated preliminary plat submission. In addition, the developer shall supply all required permits and/or road plan changes in writing.

Administrative Considerations: *All road construction and utility construction shall be completed prior to releasing any phased final plat.*

The proposed Sharondel Estates preliminary plat was reviewed inclusive of subdivision regulations for small lots along county roads with public water, underground electric, individual septic systems for the lots along Morganton

Road, and the application of a proposed on-site sanitary sewer system. As required, the preliminary plat was supplied with topographic information, road plan, drainage plan and calculations and preliminary soil information. A preliminary sewer plan and letters confirming the intent to install this system have been supplied by the sewer utility.

The comments from the Highway Engineering Department and Environmental Health Department are included in this staff analysis. The developer shall supply a certification letter from a qualified engineer of adequate compaction of the new road sections for Sharondel Estates prior to any base stone application. No lot shall be advertised or offered for sale prior to recording of any final plat.

Additional Items to be addressed by the developer: Since construction has occurred on the site and was stopped without completing the project there is a great deal of disturbed and eroded soil. There are many rills and gullies in addition to the transport of the loose material to large areas of siltation. Much of the damage is in the proposed road bed and utility trenches. The accumulation of silt is widespread across sections of road bed, in proposed lots, in previously installed drainage basins and pipes, but is largely absent from the detention basins. While the bulk of the road bed and utilities are in less than marginal condition and requires major attention, it appears that the damage is contained to the project site and that there is not a siltation problem on any surrounding property or in the county ditches.

In addition to the staff analysis items listed for preliminary plat consideration, the following shall occur:

1. All of the damages to the drainage pipes, catch basins and drainage facilities including the removal of large amounts of silt must be corrected prior to recommencing any other work. All drainage pipes must be constructed and bedded properly and all damaged materials and trenches must be corrected and replaced as necessary.
2. All of the utility trenches must be built in accordance with the utility and highway department specifications including proper bedding of pipes, location in relation to live load zone, and proper depth; all damages to exposed trenches must be corrected.
3. All of the riling and gullies formed from storm water in the live load zone must be repaired. This shall include additional excavation and "cutting out" all of the eroded areas, removal of all silted materials, and the replacement of poor sub-grade with soils adequate to compact and prepare the sub-grade to meet the specifications for compaction as required in the subdivision regulations. Essentially a great deal of the existing sub-grade is in disrepair and requires a substantial amount of work to meet compaction prior to any placement of the stone base.

4. All erosion control measures shall be re-established as per the SWPPP.
5. All of the items specified in the Letter from the Highway Department dated November 17, 2007 (attached) shall be completed prior to the application of any portion stone road base being constructed.
6. It is understood at this time that the Phase 1 final plat shall only contain a portion of the original loop road, which is to include a paved roadway, utilities and drainage facilities for that proposed phase. The entire loop road had been initially graded out and remains exposed, and a portion of the drainage facilities have been installed. The developer shall be responsible for re-vegetating all exposed road bed that is not to be constructed for Phase 1. The developer shall insure all necessary drainage facilities are in operable condition and that any drainage facilities that are not part of Phase 1 (but that have been placed in the ground) do not interfere with the function of the necessary drainage facilities, and that the exposed catch basins do not present a human hazard and shall be covered completely and marked for potential future usage.
7. The developer shall also include an access easement from the phase 1 section to the proposed location of the on-site sewer area and adjacent drainage basin.

Recommendation: Planning, engineering and environmental health department staff concurs and recommend for revised preliminary plat approval for Sharondel Estates subject to the following:

NOTE 1: Addressing the 7 items listed above and also related to previous plat approval, and meeting with staff prior to commencing and new on-site work.

NOTE 2: All necessary permits and on-site erosion controls shall be re-established.

NOTE 3: The instructions in the above staff analysis including erosion control, road construction; common driveway construction, installation of utilities, drainage construction and POA documentation.

- C. Final Plats – Major Subdivisions: None
- D. Preliminary and Final Plats - Major Subdivisions:
- E. Preliminary and Final Plats - Minor Subdivisions: None

Misc. Items:

1. Variance requests for the Joyce Emert Property and Lot 2 Hatcher Property off of Hwy 411 North and Temple Road.

The owner is requesting to increase the size of the Joyce Emert Property by acquiring a portion of Lot 2 of the Hatcher Property. The Environmental Health Department shall review the reduction of Lot 2 of the Hatcher property in order to determine if field line areas or duplication is affected.

A portion of the Russell tract is being added to the Joyce Emert parcel. While the Russell parcel is being made slightly smaller, this is a correction between two previous surveys and is simply a boundary line agreement which is not a re-plat and does not fall under the jurisdiction of the subdivision regulations. No action is required other than verification that the boundary line agreement is recorded prior to the Joyce Emert plat.

In order to accomplish the proposed division, the following variances are indicated.

- The existing Joyce Emert lot is 17,859 square feet; the proposed increase in lot size creates a lot that is 27,977 square feet which is less than the required 30,000 square foot minimum under the zoning regulations. The minimum lot size for a lot along a major arterial in the subdivision regulations is 43,000 square feet. Past precedent has established that increasing the square footage of a substandard lot may be considered as an improvement, which has been justification for approval of variance by the planning commission. Roger Fields should be contacted to determine if a zoning variance through the BZA is also necessary.
- As shown on the proposed plat, the Joyce Emert parcel is indicating a 30' right-of-way (ROW) dedication along Highway 411. A variance to the Subdivision Regulations to the ROW to be dedicated along Highway 411 North is required (per this plat) since Highway 411 North is a Major Arterial and the required ROW is 40 feet from center line. A 40' front setback is also required which can be met with the 30' ROW dedication indicated since the existing home would still meet the required setback. However, the addition of 10 more feet of ROW would further reduce the size of the substandard lot. This home and lot are of long standing and the two adjacent parcels both indicate only a 30' ROW. Increasing the ROW to 40 feet as required along Hwy 411 would make the home encroach into the 40' minimum front setback and would further reduce the proposed lot area and may also reduce the reserve septic capability. There appears to be no advantage to requiring the additional 10' ROW at this location at this time.

- Lot 2 of the Hatcher property currently consists of six mobile homes and, one accessory structure with a shed on one parcel of land. This request will further reduce the size of this parcel. A zoning variance rfor density for lot 2 may be necessary. The required density in the R-1 zone is 1.2 units per acre. The proposed parcel indicates that the six mobile homes on 88,575 square feet is equal to 2.9 units per acre. Roger Fields should be contacted to determine if a zoning variance through the BZA is also necessary.

In addition any approval of the proposed subdivision would require an encroachment note for the exiting storage building on Lot 2 that encroaches into the front setback.

Sight distance appears satisfactory at this location. The home on the Joyce Emert parcel and the six mobile homes Lot 2 of the Hatcher property are existing and of long standing.

Any variances should be conditional on the approval of the Environmental Health Department.

Planning staff has no comment on the setback, minimum lot sizes and density requirements as per zoning. Any zoning variances for these matters should be addressed to the Board of Zoning Appeals.

Mr. Ferguson has discussed the situation with staff, and agreed in principle that a subdivision that did not result in any net detriment to the property would be acceptable subject to approval of the Planning Commission and the Board of Zoning Appeals for both lots.

Blount County Highway Department

Bill Dunlap, Superintendent

415 Louisville Road

Alcoa, Tennessee 37701

Phone: (865) 982-4652

Fax: (865) 681-8938

Attachment

Mr. Ronnie Ratledge
5935 Bingham Lane
Maryville, TN 37801

November 14, 2007

**RE: Sharondel Estates
Longview Road**

Dear Mr. Ratledge,

On November 11, 2007 we performed a site review of the Sharondel Estates Property off Longview Road. We inspected the drainage structures and sub grade of roadway that have been installed within the development. During this and prior inspections several concerns remain to be incomplete before the next stage of construction.

The following concerns listed below are referenced as per the road and drainage profile provided by Sterling Engineering, Inc.:

Drainage

- 1.) Sediment and debris needs to be removed out of all storm sewer pipe and structures.
- 2.) Storm sewer structures will need to have inverts poured with concrete to prevent standing water.
- 3.) Outlet pipe from Detention Pond A is improperly bedded.
- 4.) Storm sewer pipe #29 to Detention Pond B is improperly bedded and possible separation of a joint.
- 5.) Re-evaluate the road grades at entrance to accommodate the proposed concrete swale.

Live Load Zone

- 1.) Live load zone is less than required, creating problems with utilities and roadway in several areas.
- 2.) Utilities are not properly back filled with stone within the live load zone.
- 3.) Correct all catch basin structures to insure proper width between face of curb to face of curb.

Sincerely,

Ronnie Sharp
Blount Co. Highway Dept. Inspector
865-982-4652

Justin M. Teague
Blount Co. Stormwater Dept.
865-681-9301