PHILLIP LEWIS ENGINEERING
Structural + Civil Consultants
23620 Interstate 30 | Bryant, AR
PH: 501-350-9840

July 24, 2024

Colton Leonard
Community Development
Community Development Director
cleonard@cityofbryant.com

RE: New Beginnings

To whom it may concern,

Please accept this letter as our response to the planning/engineering comments regarding the Springhill Retail development. We are requesting to be placed on the next upcoming DRC agenda. Please find our comment responses below.

Public Works

1. Show Existing Sanitary Sewer Manholes and Lines.
   - Existing downstream sewer is now shown on the plan set.
2. 5% Grade on 8" Line Section
3. 4" Service. Inlet Drop?
   - 4" service to tap into manhole at flow line +0.1'.

Stormwater

1. Discuss master drainage for the site as a whole.
   - Revised drainage plans and drainage report are included with this resubmittal.
2. Does each parcel have its own permit or are all parcels related to this project under one large scale permit.
   - We are still working on figuring this out. Currently, the site as treated as it's own.

Engineering

1. General
   a. Provide a Stormwater Management Plan
   b. Provide surveyed property lines on a survey plat.
      - Attached within this submittal and added to the civil set.
   c. Show existing conditions?
      - Revised civil set to show existing conditions.
   d. Any demolition?
      - No demolition for this site other than site grubbing.

2. Preliminary Drainage Report
   a. The drainage report does not include all requirements that are in the Bryant

Stormwater Management Manual.

- Revised drainage report in an effort to meet the requirements of Bryant Stormwater Management Manual.

b. These comments are not exhaustive.

c. Provide a table of contents

- Added table of contents to the drainage report.

d. On page 4 of the report, add a column which shows the post-development peak discharges without a detention pond.

- Added the post-development peak discharges without a detention pond.

e. Page 64

i. Provide summary of capacity calculations for the proposed storm sewer pipes and inlets.
   - Added storm sewer sizing for all pipes and inlets.

ii. Show inlet sizing calculations
   - Added storm sewer sizing for all inlets.

iii. Show that the existing storm system has the capacity for the additional peak flows from the new storm sewer system.
   - Added storm sewer sizing for all pipes, including downstream.

iv. The known Q's shown on pages 65 and 66 of these calculations cannot be found.
   - Revised the known Q's to match the hydrographs Q's found for each basin with the drainage report that releases to an inlet.

v. The manning's roughness number used for the pipe does not match the roughness number shown in the manual for reinforced concrete pipe
   - Revised to match the roughness coefficient for reinforced concrete per the manual.

vi. The slope on the storm sewer pipe is less than the minimum slope required for a pipe flowing gull. Show that the velocities of flow in the pipe meet the minimum of 3.0 fps, as required in the stormwater manual
   - Revised to meet the minimum slope.

vii. Provide calculations that show that the storm sewer pipes have the capacities to carry the actual peak discharges shown in the calculations.
   - Added storm sewer sizing for all pipes.

viii. Provide hydraulic grade calculations for the storm sewer system, including the receiving existing system
   - Added table to the drainage report.

f. Pages 68 & 69

i. On the post-development drainage plan, show check points where stormwater is collected by inlets as well as where the stormwater is discharged from the site. Revise drainage basins accordingly.
   - Revised drainage basins on the post drainage maps.

ii. On the pre-development drainage plan, show the same points where stormwater is discharged from the site. Revise drainage basins accordingly.
   - Revised drainage basins on the pre drainage map.

iii. Submit revised drainage basins for review prior to revising the drainage calculations.
   - Due to the nature of changes, revised drainage basins and revised drainage calculations are included in this resubmittal.

g. Per 200.3.5.i. of the stormwater manual provide calculations of the storage volume, velocities, and peak flow for the 2, 10, 25, 50, and 100 year return storms. The calculations do not provide calculations for the 50-year storm event.
   - Added 50-year storm event to the drainage report.

h. Per 200.3.5.i. Add the post-development peak flows with and without detention to the summary on page 4.
   - Added the post-development peak flows to the table.

i. Provide a means of reducing the peak discharge rates from the site so that the post-development peak discharge rates are equal to or less that the pre-development peak discharge rates. See detention volumes below.
   - Two Bioswales have been added to the plans in an effort to infiltration and filter a percentage of the increased stormwater caused by this site.

j. Per 200.3.5.f. Provide the soil loss calculations
   - .

k. Provide a summary table that shows the required storage volume for detention for each return storm

l. According to the calculations the 100 year pre-development stormwater runoff volume is 1,428 cubic feet (page 21) and the post-development stormwater runoff volume is 2.594 cubic feet (page 63). Based upon these calculations a required combined detention volume of 1,166 cubic feet is required. Demonstrate how detention is obtained and where detention of this runoff is located.

3. Drawing C1.1
   a. Add labels indicating improvements
      - Improvements and existing items are now more clearly shown.
   b. Add legend??
      - Added.
4. Drawing C1.2
   a. Add labels indicating what the improvements are
      - .
   b. Show square footage on building
      - Corrected
   c. Show existing storm drainage
      - Corrected
5. Drawing C1.3
   a. Two signs are required at van accessible / handicap spaces.
      - Concur
   b. There are two options available for van accessible spaces. See https://www.ada.gov/topics/parking/ for detailed information on van accessible space requirements.
      - Note has been revised on the ADA sign detail.
6. Drawing C1.4
   a. Add labels to improvements for clarity.

- Labels have been added.

b. The new ditch located in the northwest area of the site appears to be steep. Open channel design must follow the stormwater management manual requirements.
   - Grading has been revised and does not extend that far into the property now.

c. Demonstrate that ditch can carry flows I the drainage calculations
   - Grading has been revised and does not extend that far into the property now.

d. Show existing storm drainage inlets & pipes
   - Corrected

e. Label new and existing inlets and storm pipes
   - Corrected

f. Show or refer to location of invert in & out elevations of all inlets
   - Corrected

g. Show or refer to pipe sizes, materials, & slopes
   - Corrected

h. Label ADA compliant access ramp for two handicap parking spaces to the building
   - The ADA parking stalls ramp up to sidewalk grade with a “no curb” scenario negating the need for an ADA ramp.

i. Label dumpster
   - Corrected

7. Drawing C1.5
   a. Add labels for clarity
      - Labels have been added.
   b. Show detail of curb cut
   c. Provide scour / erosion protection downstream from the curb cut
      - Revised to discharge into bioswale.
   d. Show existing storm drainage inlets & pipes
      - Corrected
   e. Label new and existing inlets and storm pipes
      - Corrected
   f. Show or refer to location of invert in & out elevations of all inlets
      - Corrected
   g. Show or refer to pipe sizes, materials, & slopes
      - Corrected
   h. Will the building have gutters & downspouts?
      - Yes, we assume it will and have designed drainage accordingly.
   i. Label ADA compliant access ramp for two handicap parking spaces to the building
      - Addressed in earlier comment.
   j. Label dumpster
      - Corrected
8. Drawing C1.6
   a. Where does existing junction box CA3 drain?
      - The entire existing storm system can be seen on sheet C1.1. The two new inlets drain to the existing storm system installed under the Seminary project.
   b. Show storm drainage information on Drawing C1.5, not as part of the utility plan.
      - Corrected
   c. Where does the existing sanitary sewer drain?

- Existing sanitary sewer drains through the Seminary extension to the main trunk line running to the adjacent SS pump station. Overall SS routing can be seen on C1.1

d. Show the existing sanitary sewer pipelines and manholes
- Corrected.

e. Show all existing utilities
- Corrected.

9. Drawing C1.10 & C.1.11
   a. Explain how the basins show reflect runoff that contributes to discharge from the site.
   - Basins have been completely revised from last submittal.

Planning

1. What materials are being used on the building facades?
- The base of the walls will be brick. The upper portions will be Hardi-Plank fiber-cement siding (painted).

2. Provide the percentage of windows and doors compared to the overall front façade.
- The glass and window area is not currently the required minimum, but shall be expanded to reach the 20% coverage requirement on the front façade.

3. Provide a sheet showing the building and site with the lot boundary, setbacks, and access / utility easements for this particular lot within the Blessings Addition Subdivision.
- A Replat of Blessings Addition is included in this submittal. This proposed replat is represented underneath the current civil design plans.

4. On the Overall site plan sheet it would also be helpful to show the lot lines for the blessing Addition subdivision.
- See comment above.

Fire

1. Need fire hydrant locations on plans
- I've annotated existing fire hydrant locations on sheet C1.1. An additional hydrant has been added to serve this facility.

2. FD access road shall be within 150' of all potions of exterior walls per 503.1.1
- The fire access road to Midland has been added per conversations at last DRC meeting.

3. If FD access road is longer than 150' an approved turn around shall be provided. Appendix D of Fire Code.
- See comment above.

This letter accompanies a revised civil plan set, replat of the existing lot, and a drainage summary.

If you have any questions, please give me a call.

Sincerely,
Garrett Rich
Phillip Lewis Engineering.
501-213-5190