



**BOLTON  
& MENK**

Real People. Real Solutions.

418 S Dawson Street  
Raleigh, NC 27596

Ph: (919) 719-1800  
Bolton-Menk.com

## MEMORANDUM

**Date:** 01/29/2024  
**To:** Michael Elabarger  
**From:** Brian Laux, PE  
**Subject:** Arden Senior Living Center  
SDP 24-01, 1st Submittal  
Town of Rolesville, NC

This memo summarizes the review of site plan documents submitted by McAdams Company dated 01/03/2024 (received 01/04/2024).

### Sheet Cover Sheet:

1. TRC reviews the SDP for single lots at a Construction plan level.  
If you as a design team wish to complete Site plan (SPD) and then propose Construction drawings later as a separate submittal as typical subdivision development (CID) let us know.

Next submittal for Engineering we would need to be able to complete a full review.

- storm package 10yr min/Culvert 25 yr /2yr gutter
  - Pre/Post/Drainage inlet maps
  - Utility profiles (water and sewer) for permitting.
2. Update the project number to SDP-24-01 and update the year to 2024
  3. On the site plan, all 10 handicap spots are shown as van parking spots.

### Survey Sheet:

4. Add zoning districts so we can confirm adjacent buffer requirements.
5. Add Topographic contours for property and 100' past property boundaries.
6. Will the (2) parcels be combined with project goes in for platting easements?

### Overall Site Plan C2.00:

7. Label as "SCM access and Maintenance Easement" and it needs to connect to a public Right of Way, and should include all parts of SCM, dam, walls, and geogrid from walls for maintenance purposes.
8. EXISTING Permanent Drainage Easement (overlapping/covering buffer)  
There will likely be little to no existing trees remaining with LAPP construction projects and this project. How will 50ft buffer be provided. (see inset on markups for details)
9. Provide sight distance triangles for connections to NCDOT roadways.
10. Current LAPP project does not show the driveway entrance as part of that project. Coordination will be required, or driveway permit is required with NCDOT.
11. Per Fire Appendix D, (D104.1) a second access point to the site will be required for fire.

12. Add a demolition plan for version 2 submittal if any will be proposed.
13. Add zoning districts so we can confirm adjacent buffer requirements to all site plan sheets.
14. Add required setbacks on site plan sheets.
15. Add square footage for each building either on overall sheet or enlarged sheets.
16. How is trash being handled for this site as no dumpsters are shown in the proposed plans. Add dumpster or clarify intent for trash.
17. Provide fire truck route exhibit to verify radii for access, 26ft driveway along route to get around Building 4/5 story. Provide an exhibit for trash truck access to confirm turning radii will be sufficient for fire access.
18. Provide dumpster route and vehicle turning exhibit to verify radii for access.
19. If any loading or unloading is intended to be done. Provide a loading and unloading zone for the delivery vehicles.

**Site Plan Area A C2.01:**

20. The minimum radius for fire access is 28'. Due to this, radii on site will need to be updated to fulfill this requirement.
21. The min width for Fire access with 4/5 story building is 26 ft. drive aisle from EOP to EOP as outlined in fire appendix D for Wake County.

**Site Plan Area B C2.02:**

22. Verify minimum depth with planning for all parking spaces. TYP.

**Overall Grading Plan C3.00:**

**General Note:** Not able to complete review without information on storm drainage.

Table/Chart or provide labels in sheet with design info

23. Per IMAPS there are flood prone soils located underneath your 4/5 story building, these will need to be inspected by a Geotechnical Engineer during construction to verify they are acceptable.
24. Verify drainage area and where the drainage is going for the FES coming from Burlington Mills Road. All other drainage is being collected and routed except for at this location Verify where this drainage will go with contour labels.
25. Label all pipes that will be collected and routed to the proposed SCM or routed through your site: 15" pipe size (by others) label the existing invert to show drainage can get off site under current conditions.
26. All road drainage collected will need to be included as part of the calculations package.
27. A fee in lieu will be required for the future sidepath along Burlington Mills (5ft sidewalk existing)
28. Move the text to make the leader easier to follow.
29. Label the Rip Rap ditch as (by others).
30. Drainage easement needs to connect to a public Right of Way, and should include all parts of SCM, dam, walls, and geogrid from walls for maintenance purposes.

### **Grading Plan Area A C3.01:**

31. The exterior ground elevation is usually 6 inches lower than FFE. Due to this drainage would pool at the northern exterior of building 4.
32. During CD's provide grade to show Drainage between duplexes can get out or provide additional DI.
33. Provide swale calc's for drainage to verify if dissipater is required to avoid washout.
34. EXISTING Permanent Drainage Easement (overlapping/covering most of buffer)  
There will likely be little to no existing trees remaining with LAPP construction projects and this project. How will 50ft buffer be provided.
35. Will need to know the grading conditions surrounding the entrance off Burlington Mills Road.

### **Overall Utility Plan C4.00:**

36. Label the existing waterline size.
37. verify with COR on if WATER LINE Improvements are PROPOSED ALONG FRONTAGE?  
Property frontage improvements requirements Utilities and road (LAPP project?)

### **Utility Plan Area A C4.01:**

38. Clarify if you are proposing (1) meter for (4) units or a gang meter.
39. 6" services must tie directly into a structure and cannot tie into the line directly. Revise accordingly.  
TYP.

### **Utility Plan Area B C4.02:**

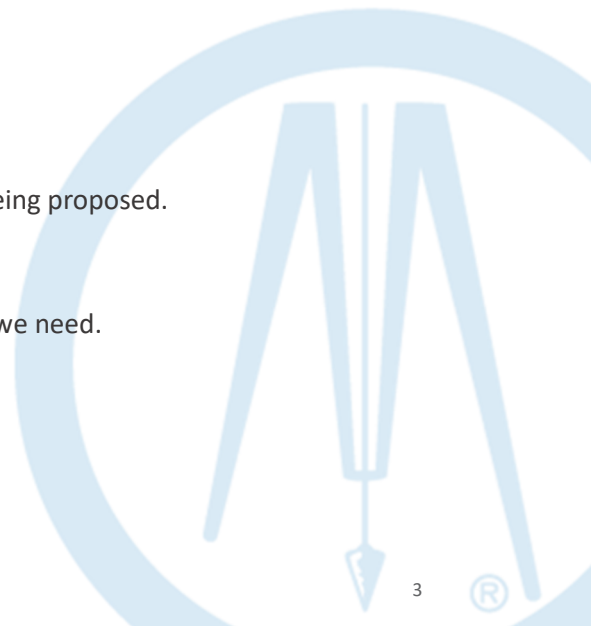
40. Label the cap: xx" cap.
41. Clarify if you are proposing (1) meter for (4) units or a gang meter.
42. 6" services must tie directly into a structure and cannot tie into the line directly. Revise accordingly.  
TYP.
43. Update water line label to TEE instead of CROSS.
44. 8" services must tie directly into a structure and cannot tie into the line directly. Revise accordingly.  
TYP.
45. Verify that (1) service will be sufficient for the entire building.
46. An 8" service would be a main.
47. Update to show (3) required GV's.

### **Site Details C8.00:**

48. Update NCDOT details to 2024 version TYP.
49. 848.06 (2024) Provide all details related to ADA ramps that are being proposed.

### **Storm Impact Analysis:**

50. Next submittal for Engineering to provide a complete full review we need.
  - storm package 10yr min/Culvert 25 yr/2yr gutter
  - Drainage inlet maps
  - pipe profiles



51. Design impervious value provided in the calculations does not match the cover sheet. Is this due to additional drainage from Burlington Mills Road? Provide Drainage area map of impervious to verify values.
52. The Top of the dam is designed to over top your retaining wall for your 100-year storm. Revise so the wall is not over topped.
53. Include impervious areas for all drainage designed to be routed to your pond.
54. Clarify the plan for collection on garages? Will DS tie to CB?
55. OUTLET for POA as the area looks lower than property to west?
56. DA behind curb in ROW to our site (include half of roadway for STR(s) collection and show where it will be routed too.