November 26, 2007

Mr. Bradley Mustain Barthol Design Associates 550 Southlake Boulevard Richmond, Virginia 23236

RE:

Arco Iris Latino Market 6111 Staples Mill Road File No. 4923 - P.O.D. No. 79-07

Dear Mr. Mustain:

Enclosed are marked-up prints of the water and sewer plans that are part of the plan of development submitted to the Planning Department on October 12, 2007 and forwarded to DPU on November 5, 2007.

DPU recommends approval of these plans by The Planning Commission.

Please address the following comments before submitting the construction plans for signature.

Sheet C2:

- 1. The sanitary sewer shown will be abandoned and must be indicated on this sheet. Remove the abandoned portion from Sheet 4 and show the sewer terminating at the manhole to remain.
- 2. Provide the following note on the plan, "Utilities that need to be abandoned will be done so in accordance with DPU Standards 1.1.04C and 9.3.10."
- 3. Reference CSB/CWB Sheet 148 SW for this project on this sheet, Sheet C4 and Sheet C5 as well.
- The portion of the easement, that currently encompasses the sewer to be abandoned, 4. must be quit claimed after the new easement plats have been recorded.

Sheet C4:

- 5. Provide material quantities for this project on the plan.
- 6. Provide water and sewer material notes on the plan.
- 7. Will the existing meter continue to be utilized? If it will, a Domestic Meter Sizing Form will be required to show that the meter can handle the proposed addition. If the proposed meter will serve both the proposed building and the existing building with the addition, indicate that the existing meter will be abandoned on the demolition sheet and remove it from this sheet.
- The service lines from the detector check and meter must be shown to the building. 8.
- 9. Provide a domestic backflow preventer for the building.
- 10. Callouts are required for backflow preventers. The callout must include the size and detail number. If the detail is not located on the same sheet, a sheet reference for the detail is also required.
- 11. A Siamese connection is required for the sprinkler system. This Siamese connection must be remote from the building and within 50' of the dedicated fire hydrant.
- 12. Show all fire hydrants utilized for fire protection for this project.
- 13. Show the location of the dedicated fire hydrant on the plan.
- 14. Provide an easement for the water meter and detector check assembly or install it in the right of way.
- 15. The water main extension must be place in an 18" or 20" steel encasement pipe. As designed, a back tap may be required. The connection to the 8" CI line must be made

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> via an $8" \ge 6"$ tapping sleeve and valve, and then a $6" \ge 8"$ increaser will be installed. An 8" main would be extended at that point within the encasement pipe.

- 16. Show the limits of the required encasement pipe on the plans and provide its thickness in the callout.
- 17. Lighten the hatching and the limits of the bore area so that the encasement pipe can be clearly seen when provided.
- 18. Remove the notes indicating that the sewer will be abandoned. The note should be provided on the demolition sheet.
- 19. If one meter will be utilized to serve both buildings, than only one monitoring manhole will be required.
- 20. Provide a profile of the monitoring manhole on the profile sheet. The monitoring manhole should be between 5' and 7' deep.
- 21. Provide invert information for the proposed monitoring manhole.
- 22. Provide the slope and length of the proposed sewer laterals on the plan.

Sheet C5:

23. This sheet is not required for this project. There are no large scale extensions required for this project and it can be removed at the engineer's discretion.

Sheet C8:

- 24. Provide a profile of the run of sewer between the monitoring manhole and the existing manhole on this sheet.
- 25. Change the label on the water main profile to indicate the encasement pipe will be steel and not concrete.

General:

- 26. Provide the Domestic Meter Sizing Form on the plan.
- 27. Provide the Fire Flow Estimate Forms on the plan. DPU utilizes the ISO Method to determine needed fire flow. Fire flow for the site should be calculated using this method and calculations should be provided on the form in the DPU Standards. DPU utilizes a 50% reduction factor for buildings with sprinkler systems.
- 28. Provide a revised Review Checklist based on the comments provided on the marked up form.
- 29. Provide an information sheet for the preparation of Agreements. The Owner and the County must execute Agreements prior to the approval of these plans.

If you have any questions concerning the above noted comments or the plans, please contact me at 501-4500.

Sincerely,

Alvin E. Christian, Jr., P.E. Senior Engineer, Private Development

Enclosure

cc: Ms. Celia Serrano, Kings Construction, Inc. bc: R. Claytor A. Seal Reading File AEC/cca