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1352 Marrows Road, Suite 100 • Newark, DE 19711 • Phone 302-731-9176 • Fax 302-731-7807

May 5, 2020

Town of Elkton
P.O. Box 157
Elkton, MD 21922

Attention: Ms. Jeanne Minner, AICP

Subject: **Southfields Parcel I – Preliminary Site Plan**
KCI Job No: 0296007RP – Task #193i

Dear Ms. Minner;

As requested, we have reviewed the Preliminary Site Plan for the Southfields Parcel I located off of Route 40. The purpose of this plan is provide infrastructure for a proposed warehouse, including parking lot and stormwater management. The plan is dated April 9, 2020 and was prepared by MRA.

We find the plans generally acceptable, subject to the comments below.

1. Remove the Stormwater Egress/Ingress certification from the Site Plan. This shall only be located on the SWM/ESD Plans. Add the following certifications to the cover sheet of the Site Plan:

Engineer's Certification

I, _____, certify that I am a professional engineer, registered in the State of Maryland and that this plan was prepared by myself or under my supervision and that said plan complies with all applicable ordinances and regulations of the Town of Elkton.

Signature

Registration Number

Date

Owner's Certification

We, _____, hereby certify that this plan was prepared at my direction and all land clearing, construction, and development shall be done pursuant to the approved plan.

Signature

Date

2. Currently, Utility Note 3 states that a 12" vertical separation is needed between water and sewer pipes. Per the Town's Standard Specifications, 18" of vertical separation is needed between water and sewer pipes.

3. Add a note to the plan that a phasing plan shall be submitted to the Town of Elkton when available and whenever the phasing is updated, a new phasing plan shall be submitted to the Town of Elkton.
4. Provide the proposed lot coverage. Per the PUD requirements, the maximum lot coverage is 85%.
5. General Note 8 states that drainage and swale easements will be provided. However, they are not shown on the plan. Revise the plan accordingly to show all drainage easements on the plan.
6. Add the dates of approval of the variances, modifications, and waivers to General Note 13.
7. Revise the parking breakdown for each building to also list the number of total handicap spaces required/provided and number of van accessible spaces required/provided.
8. The Road Plans, Sanitary Sewer System, Water Distribution System, etc. shall follow the Town's checklists (attached).
9. Provide additional spot grades to show the drainage within the parking lots.
10. Provide a spot grade at the corners of the buildings to ensure that there is at least a 6" drop within 10' of each corner of the buildings.
11. Provide profiles/schedules for the sanitary, storm, and water.
12. There appears to be disturbance outside of the proposed LOD for the storm drain pipe between I-517 and I-521. Revise the LOD to be correct.
13. Provide handicap ramps and crosswalks at all necessary locations to ensure that the site plan meets ADA requirements. There are many areas where sidewalk meets the EOP and there is not a ramp and crosswalk striping provided.
14. Dimension the handicap parking spaces/aisles on the site plan. Regular handicap parking and van accessible parking shall be denoted on the plan.
15. Dimension all drive aisles on the site plan (many drive aisles are not labeled on lots 1 and 2). Per the Town's Zoning Code, they shall be 24' in width for 90 degree parking stalls.
16. Provide road section details of Road K that follows the Town's Standard Specifications. Typically, the road sections have 6' of grass between the back of curb and sidewalk, a 5' sidewalk, a 2' grass area between back of sidewalk and R.O.W. and a 5' utility easement outside of the R.O.W. See the Town's Road Section details for further clarification. Just northwest of M-193 there doesn't appear to be enough room for the 6' grass between back of curb and sidewalk, 2' grass area behind sidewalk, and 5' utility easement.
17. Per comment 22 of the PUD review letter, there was a previously approved construction plan for the entrance and boulevard for this parcel that was designed and approved with the development of Tax Map 316 Parcel 2462. If the plan needs to be modified, it will have to be approved by the Town. However, the utilities, road configuration and entrances to the adjacent parcels shall remain the same so that the adjacent parcels can tie in with minimal disturbance.
18. Label the typical sidewalk widths on the site plan.

19. Provide necessary signage/stripping on the site plan or provide a signage/stripping plan.
20. The existing trees appear to be on the site plan. Remove the trees from the site plan if they will be removed.
21. Currently, there appears to be utility structures in incorrect locations. For example, there are fire hydrants in the sidewalk/drive lanes and catch basins that are located behind the curb line. Revise the plans accordingly so that all structures are located in the correct locations.
22. Provide the pipe material of all water/sewer mains and laterals/services. They shall follow the Town's Standard Specifications.
23. A curbstop/water valve shall be provided at the R.O.W. line for each water main that enters each lot to delineate public vs private water.
24. On sheet C-201, the metes/bounds data the bottom right of the viewport are cut off. Revise the plan accordingly so that all metes/bounds data is clearly shown.
25. Verify that the stormwater management facilities have access for maintenance.
26. Add all of the necessary Town of Elkton details to the plan for the work being proposed within the Town's R.O.W. This includes but is not limited to sidewalk, ramps, curb, pavement tie-in, etc.
27. Submit the following:
 - a. Approval from SHA for the entrances and any work within the state R.O.W.
 - b. SHA Plans should be submitted to KCI and the Town so that we can verify that the tie-ins to the Town's R.O.W. is consistent between the two plans.
 - c. Approval from Cecil Soil Conservation District.
 - d. Approval from Singerly Fire Company.
 - e. Lighting Plan.
 - f. A detailed response letter for this letter.
 - g. Submit the Town's water and sewer capacity form with the proposed flow information. Some guidance to the flow requirements are listed in comment 28 of this letter.

28. The following comments and information are in regards to the Force Main:

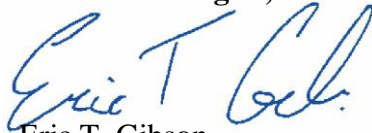
Flow projections were not provided with this submittal. Using a flow projection factor of 0.03 GPD/SF for warehouse usage and a peaking factor of 4, the table below summarize the projected average and peak flows from the three buildings.

	Building 1	Building 2	Building 3
Building Area, (SF)	769,500	1,096,200	924,000
Average Flow Q_A , GPD	23,085	32,886	27,720
Peak Flow Q_P , GPM	64	91	77

- Each building will be equipped with a grinder pump discharging flow via a 2" individual force main to the onsite gravity system. The design pumping rates were not provided with this submittal. Provide force main sizing calculation based on the pumping rates.
- The preferred velocity range for a force main is 2.5 - 5.5 FPS, corresponding to a flow range of 24 – 54 GPM for a 2" force main. The proposed 2" force mains appear to be undersized based on preliminary analysis.

If you have any questions regarding this matter, please call me at (302) 318-1087.

Sincerely Yours,
KCI Technologies, Inc.



Eric T. Gibson,
Engineer in Training



C. Thomas deLorimier, P.E.
Associate/Senior Project Manager

cc: Brie Humphreys, Charles Bromwell, J. Daniel Handley, PE (Town of Elkton)
KCI Correspondence/File