GCG ASSOCIATES, INC.

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June 10, 2015

Mr. Nathaniel Strosberg, Town Planner 101 Main Street Town of Ashland Ashland, MA 01721

RE: "Lot 2B – Butterfield Drive, Ashland, MA Site Plan and Drainage Design Review

Dear Mr. Strosberg:

GCG Associates, Inc. has reviewed the following information for the proposed Site Plan for Lot 2B Butterfield Drive in Ashland, MA.

Plan References: "Site Plan of Land, Lot 2B - Butterfield Drive, Ashland, MA",

Dated: May 15, 2015, prepared by: GLM Engineering Consultants,

Inc.

Documents: Stormwater Management Report for "Lot 2B – Butterfield Drive,

Site Development Plan, Ashland, MA", Dated: May 18, 2015,

prepared by: GLM Engineering Consultants, Inc.

Based upon our review of the above information, we offer the following general comments and comments with respect to compliance with Town Bylaws: Chapter 282 - Zoning, Chapter 343 - Stormwater Management, Chapter 348 - Wetlands Protection Regulations, Chapter 326 - Sewers, and Chapter 334 - Water. The numerical section of the regulations is referenced at the beginning of each comment unless it is a general comment.

GENERAL PLAN COMMENTS

The following are general comments with respect to the plans.

Plan 1 of 9, Cover Sheet

- 1. The property as shown and listed in Town of Ashland Industrial Zone. The property is also located within the Pond Street Mixed Use Overlay District (PSMUOD), the Solar Overlay District (SOD). Overlay districts should be noted on plans.
- 2. The intended lot and building use should be listed on Cover Sheet of plan set including square footage of building intended for office space and type of garage bays.

3. The parking chart shows a total of 10 parking spaces provided. Plan 3 of 8, Layout & Materials, shows 9 spaces (8 spaces, 1 accessible) and 20 truck parking spaces. Truck parking spaces should be indicated in parking chart.

Plan 2 of 9, Existing Conditions

- 1. Existing Conditions plan should show size and type of existing utility mains in roadway.
- 2. Existing Conditions plan should show ownership of abutting properties.
- 3. The existing sewer manhole in Butterfield Road shows a 10" sewer coming from the direction of the property. The route of the sewer should be verified and if it does enter onto the property it should be shown.

Plan 3 of 9, Layout & Materials Plan:

1. Parking spaces and bituminous cape-cod berm are shown abutting east property line. Consideration should be taken to implementation of either vegetative or fenceline screening adjacent to abutting property. Also snow storage should be considered.

Plan 4 of 9, Grading, Drainage and Utilities:

- 1. Grading extends on to abutting property on the easterly sideline. Easements or proof of approval to grade on to this properties should be provided.
- 2. The existing water main in Butterfield Drive should be shown with size and type.
- 3. Plan should show a location and size for the existing gas main in the right-of-way.
- 4. Plan should indicate rip-rap spillway outlet protection at flared end sections discharging from subsurface infiltrators to wetlands.
- 5. Access to the infiltration basin should be provided. A retaining wall prevents any equipment being able to access the basin for maintenance.

Plan 9 of 9, Details 3

- 1. Size should be specified for Oil and Grease separator. Detail provides three sizes available for a 6" inlet pipe.
- 2. Trench pavement shall indicate depth and type of asphaltic mix per DPW regulations. See comments 326-12 and 334-58.
- 3. Flowable fill should be used for backfill of trenches in the street.

Plan E-HYD

1. TP#15-1 groundwater elevation is shown at elevation 154.0 and is 154.5 based on soil test logs.

GENERAL DRAINAGE COMMENTS

The following are general comments with respect to the drainage system.

1. The drainage pipes and catch basins are designed for a 25 year event. They should be designed for a 100 year event to allow the stormwater to reach the basins which are designed for a 100 year event.

- 2. The top of the infiltration basin is at elevation 163.5 and the 100 year flood elevation is at 162.93 which provides less than 1 foot of free board. The basin should be designed and graded to provide a minimum of 1 foot of free board.
- 3. The width of the berm around the infiltration basin is 6 feet of less. The width should be 8 to 10 feet to allow for a maintenance vehicle to access around the top of the berm.
- 4. The size of the rip rap area around the pipe outlets should be identified on the plans.

CHAPTER 282 – ZONING

- The parking table as shown on the plans indicates that the Building Inspector requires 7 spaces. The chart indicates 10 and the plan shows 9 spaces and 20 truck parking spaces. Per the bylaw the Building Inspector makes this determination since no use is identified in the table.
- 282-5.2: Intended areas for loading shall be marked on plans for compliance with section requirements.
- Any proposed signs shall be in compliance with this section for industrial zones. No signs are shown on the plans.
- 282-5.4.1 General. Landscaped buffer areas are required in all side and rear setbacks with no more than minor removal of existing trees and ground vegetation. Consideration should be taken to providing a landscaped buffer area along the eastern property line.
- 282-5.4.4 Parking areas containing eight (8) or more spaces shall contain or be bordered by at least one (1) tree per eight (8) spaces. Implementation of this standard shall consider truck parking spaces.
- 282-5.6 Landscape trees along front of property shall not interfere with corner clearance set forth in this standard. No obstruction shall be allowed to block vision between two and one half (2-1/2) and eight (8) feet above the street grade within dimensional parameters.
- 282-5.7.3.1 No grading shall exceed a 3:1 slope except under special permit from the Planning Board. Proposed grading around northern side of building is shown at a 2:1 slope.
- 282-5.8.2 Site Alteration Special Permit is required from the Planning Board per this section.
- 282-9.4.4(1) Show owners' names of all adjacent properties.
- 282-9.4.4(2) Existing utility information in Butterfield Drive should be shown on the existing conditions plan. Water, drainage, gas, etc.
- 282-9.4.4(4) A plan showing that emergency vehicles can access the back of site and maneuver around the building should be provided. Visually it appears that it may be difficult for a fire truck to make it to the back of the building. Plan should also show accessibility including turning radii for trucks maneuvering in and out of parking spaces as well as turning around at end of paved lot.

- 282-9.4.4(5) A dumpster is not shown on the site plan.
- 282-9.4.4(7) No sign is shown on the plans.
- 282-9.4.4(8) Locations for exterior lighting on the site should be shown on the plan.
- Traffic data was not provided for the proposed use and how it may impact Butterfield Ave and Pond Street. Stopping sight distances should be provided and an analysis of turning movements should be provided to verify that vehicles can maneuver around the site.
- 282-9.4.10 See 282-5.4.1 comment above.
- 282-10 Parking space definition not less than 9'x20'.

<u>CHAPTER 343 – STORMWATER MANAGEMENT</u>

- 343-7.6.10.1: Plans should show Wellhead Protection Zones or indicate that the site is not located within or near the same. Shown on design plans, should be included on stormwater plans.
- 343-7.6.10.6 A notation should be added to the plan of the datum used. If NAVD 88 is used, a waiver should be requested. Shown on design plans, should be included on stormwater plans.
- 343-7.6.12 The drainage report provided shows that the overall net rate and volume form the development will be equal or less than currently flows off the site overall. The report shows that equal or reduced stormwater will be discharged to the street than currently is discharged. An incorrect CN value is used in calculations for subcatchment E-4. Calculated value equals 30 where 96 is used in HydroCAD calculations.
- 343-7.6.16: Stormwater Management Plan Contents: Rip-rap spillways should be proposed and detailed for pipe flared end sections entering wetlands.

CHAPTER 326 - SEWERS

General:

- Sewer system construction should meet the requirements of Bylaw Chapter 326 Sewers.
- Typical Depth and type of asphaltic mix shall be determined by the DPW or an authorized representative of the Highway Division.
- 326-14 Typical trench detail or notes should indicate materials as in this section.
- 326-15 & 16 The sewer system details or notes should indicate fitting types as required in Sections 326-15 and 326-16.

CHAPTER 334 - WATER

General:

- 1. Water main and service construction should meet the requirements of Bylaw Chapter 334 Water.
- 334-56/57 The water notes should indicate valve, appurtenances and fitting types conforming to these sections.
- 334-58 E 4/5 Permanent trench pavement shall comply with type and lift thickness as specified in these sections (2-1/2" base and 1-1/2" top).

If you have any questions regarding this matter, please contact our office.

Respectfully Submitted, GCG Associates

Michael J. Carter

Michael J. Carter, P.E. Project Manager