

The regular meeting of the Bridgewater Planning Board convened at 6:30 pm in the Council Chamber in the Academy building.

MEMBERS PRESENT: Mr. Driscoll, Ms. Guarino, Mr. Hall and Mr. Sullivan

ALSO PRESENT: Mr. Delonno and Mr. Etoniru

FIREFLY LANE PUBLIC HEARING CONTINUATION

The public hearing reconvened at 6:30 pm

Correspondence received since the last hearing was read into the record:

1. Azu Etoniru emailed report-2/1/17-
The applicant has submitted revised plan and drainage report dated January 23, 2017. The plan includes a complete redesign of the drainage system, wherein the drainage basin has been relocated to the southeast end of the subdivision site. Test pits labeled TP-3-Lot 2, TP-4-Lot 2, TP-1-Lot 3, TP-2-Lot 3, TP-3-Lot 3, and TP-4-Lot 3 are shown along and adjacent to the existing tree line; none of these test pits are within the proposed drainage basin. A groundwater recharge system is proposed underneath the basin. Additionally, the design data for the drainage pipes still assumes a linear relationship between the depth of flow and the diameter of the pipe in computing the in-line flow velocity; this assumption is flawed and does not represent the actual relationship between the depth of flow and the rate of flow for a conduit with a circular geometry. At this point this office is holding the review in abeyance in order to minimize the applicant's engineering design and review expense until soils and groundwater data are obtained/documentated for the location of the recharge system underneath the basin. The applicant's engineer should also provide for review, the algorithm/software reference used in developing the pipe sizing computations data.
2. Letter from Attorney Daniel Viera-2/1/17-RE: *requested a continuance of the hearing to accommodate their review of the Town's comments to the revised plans and that the time to act on the application be extended to March 31, 2017.*

Mr. Maroney was present along with several abutters.

On a motion by Mr. Sullivan, seconded by Mr. Hall, it was unanimously voted to continue the hearing to March 1, 2017 at 6:30 pm and to accept the extension request for action to March 31, 2017.

BOARD BUSINESS

Don Brown was present. He requested a minor modification of Rolling Pines, II by the elimination of 32 of the 36 street trees shown on the definitive plan; he submitted an as-built plan showing where the proposed 4 trees were to be planted per request of the Board. Mr. Driscoll voiced concern that Lot 2 had been clear cut and felt there should be trees planted there also. Mr. Brown said that the lot had

been conveyed already. Mr. Delonno advised the members that certification from the engineer received stating that the wall was constructed in accordance with the plan; it has actually endured 2 winters; so, this meets all the terms and conditions of the decision.

Mr. Brown was also present requesting the release of \$19,400.00 of the current road bond. This would be \$14,000 for the 32 street trees at \$450.00 each and the \$5,000 being held for the Redi Rock walls.

On a motion by Mr. Hall, seconded by Mr. Sullivan, it was unanimously voted to accept the minor modification to the subdivision plan by eliminating the planting of 32 street trees with the remaining 4 being planted on Lots 5 and 6 as Shown on the as-built plan and to release \$19,400.00 of the road bond currently on deposit.....\$14,000 for the trees and \$5,000 for the walls.

On a motion by Mr. Hall, seconded by Mr. Sullivan, it was unanimously voted to accept the elimination of all but 4 street trees as a minor modification to the Rolling Pines, II subdivisions and to release \$19,400 of the road bond money on deposit.

MINUTES

On a motion by Ms. Guarino, seconded by Mr. Hall, it was unanimously voted to approve the minutes of 10/3, 10/17, 11/7, 11/21 and 12/5.

Inclusionary Zoning

Mr. Delonno asked the members to review the Inclusionary Zoning draft that he will be emailing tomorrow. He said the timing is right to get this into effect; if Claremont comes forward, it will bring us close to our affordable number.

LILAC LANE

Mr. Delonno advised the members that we are in receipt of a plan for the Lilac Lane detention basin. The plan is a precursor to the reconstruction of the basin with suitable materials and proper stabilization. A spring timetable for construction is anticipated.

SKIPS LIQUORS

Mr. Delonno advised the members that Skip's Liquors poured their footing without having an inspection; the question is to whether or not they used rebar and it may have to be taken out.

PUBLIC HEARING COPART SITE PLAN AND SPECIAL PERMIT PUBLIC HEARING-785 ELM ST.

The public hearing convened at 7:00 pm. The public hearing notice that appeared in the Enterprise on 1/18/17 and 1/25/17 was read into the record. Mr. Silva submitted the notification green cards.

Correspondence received read into the record:

1. National Grid letter dated 1/18/17
2. Highway Supt-email dated 1/31/17

Mr. Silva introduced Rebecca Baptista from his office; Tom Smith, property manager and oversees construction of these properties; Tim Buzzill, manages the Mendon facility and Lisa Doherty, Regional Manager for Copart.

Mr. Silva said that Copart asked the Zoning Enforcement Officer for a determination for the use and he, in fact, said it was an allowed use. It is an internet sales operation in which they store salvaged vehicles; stay on site for a period of time...then moved out after sales. This is the site that was originally for the South Shore Church; they are now liquidating to hopefully find a smaller site. The site is located on the easterly side of Elm Street, adjacent to the West Bridgewater line, and extending into West Bridgewater. The total acreage is 59, 34 acres are uplands; 28 acres of upland sin Bridgewater. There are wetlands to the north and east of the site. The Town River is to the north. The flood plain is shown on the easterly side. The site is a designated ACEC. The plans show areas of adjustment in grading so are replicating some floodplain and lowering it in areas to supply compensatory storage; there will be a net no volume change in that area. What is proposed is a commercial office building 12,800sq.ft and a storage yard of 25.5 acres. Adjacent to the building is a "bull pen" which is a temporary storage yard for the vehicles that have been bid upon and waiting to be picked up. The design of the building is shown in the handout that was submitted. There will be a revised plan submitted showing what is in the handout; they are currently going thru conservation. 59 parking spaces are required for the building and 86 are provided, including 4 handicap. Parking lot would be asphalt and the remainder of the storage would be a compacted impervious gravel base with a crushed stone layer above that, which would not be a gradated layer but more of a uniform kind of size. Surface water drainage would be collected in a number of locations around the site where they have sediment forbays; followed by that into detention basins; they also have a wet basin, as well. Landscaping will consist of 8' high fencing along the street and in front of that would be plantings of evergreens about 20' on center. There will be some landscaping for the building. There will be a diesel tank near the building. Lighting will be wall packs. Normal working hours are generally 7:00 am to 6:00 pm. There will be a free standing sign (roughly 100 sf).

Mr. Smith stated that they currently have around 180 physical locations around the world, mostly in the United States; also in Europe, United Kingdom, Brazil, Dubai and India.

Mr. Driscoll questioned how much acreage would consist of the gravel stone area? Mr. Silva said 22 ½. Mr. Driscoll questioned whether or not there would be any oil/water separators or infiltration in those 22 acres? Mr. Silva said no. He said Azu reached out to DEP to get an understanding on how they might look at having the storage being on a surface other than a paved surface. Larry said his understanding is that they would not be favorable of something that would be like an asphalt grinding kind of material because there are other things that could be introduced and find their way down the layer; as far as using a well graded gravel compacted, their feeling is that acts as an impervious layer so that anything that would find its way through the upper layer which is the looser stone that would be above that 3" of material above that. Anything that is into that layer isn't going down, it would just flow towards the stormwater controls that are in the back of the site. The compacted gravel base is pitched in that direction and the stone is an overlay.

Snow storage discussed; only the area around the building will be plowed.

There were no public comments.

Azu said he defers comment before getting a report to the Board; general idea of project seems workable, he said.

Mr. Silva advised the Board that the conservation meeting has been opened and has been continued to next week. Joel O'Leary will be at that meeting where he will deal with the issue of quality and what happens on the site...water quality...storm water...and how they handle any issues. He said there are other regulatory groups that will also be monitoring the site.

Mr. Silva pointed out that in his submittal of information of site plan requirement, there is a letter from him dated January 31st about expected traffic generation.

On a motion by Mr. Sullivan, seconded by Mr. Hall, the public hearing was continued to 2/15/17 at 6:30 pm.

TRINITY CIRCLE PUBLIC HEARING CONTINUATION

The public hearing reconvened at 7:43 pm.

A revised plan dated 1/27/17 had been submitted.

Email from Azu Etoniru dated 2/1/17 read into the record:

*As you are aware, the engineering review of the subdivision plan and the stormwater management report was being held in abeyance pending soils evaluation and groundwater levels determination at the locations of the proposed drainage basins, and along the proposed roadway. On Monday, January 23, 2017, I witnessed soil evaluation and analysis at the locations of the two drainage basins proposed for stormwater management, and at roadway stations 2+0, 4+0, 6+0, and 7+90. The soils encountered within the excavated soil evaluation pits were sandy loams in the upper region (commonly known as the A and B horizons or the topsoil and subsoil layers, respectively); shallow depths (20 inches to 38 inches) of medium to coarse sands were encountered just below the B (subsoil) horizon in the various pits; dense silt-loam soils with fractured rocks and stones were found underneath the shallow sands; **seasonal high groundwater level indicators (redoximorphic features) were observed at depths of 59 inches and 58 inches in Drainage Basin #1 and Drainage Basin #2 respectively, and at depths of 45 inches, 54 inches, 58 inches, and 44 inches at roadway stations 2+0, 4+0, 6+0, and 7+90 respectively.** During the soil evaluation work, I also assessed the ground cover across the site and inspected the drainage channel over which the existing driveway crosses at approximately proposed roadway station 1+50. Subsequent to the soil evaluation date, between January 25 and January 28th during and after rain events, I revisited the site to assess stormwater runoff flow patterns. Based on my site observations and initial review of the subdivision plan, I offer the following technical comments: **1**, the infiltration rate of 2.41 inches per hour used in the stormwater management system design and analysis is inconsistent with the silt-loam soils that*

are found underneath the shallow sands horizon throughout the excavated test pits. A design infiltration rate of 0.27 inches per hour is more appropriate for the site (see the attached PDF file of Rawls Rates excerpt from the Massachusetts Stormwater Handbook); 2, the watershed area analysis submitted does not conform to Section IV.B.1.a of the Board's rules and regulations (the Regs) governing the subdivision of land in the Town of Bridgewater, in that it failed to adequately include and identify existing upstream and downstream inadequacies and inventory of existing infrastructure: the drainage system that serves the church building and parking lot has not been accounted for in the analysis and design; drainage from Ashtead Road is to be tied to the new subdivision roadway but the contributory area has not been characterized or quantified; the low point of the existing drainage channel that crosses the subdivision roadway at approximately station 1+50 is adjacent to the roadway crossing: the channel slopes down-gradient from both directions towards the roadway crossing, therefore, the proposed street drain would be submerged with no positive discharge; 3, the existing sanitary wastewater disposal soil absorption system that serves the abutting land at 42 Ashtead Road is located between the two drainage basins designed for the subdivision: the subdivision plan and the drainage report have not assessed the potential impact of the drainage basins on the soil absorption system. The cross-section of the soil absorption system should be plotted on the same elevation datum as the subdivision grading in order to properly assess the potential impact of the stormwater management system on the soil absorption system; 4, the post development watershed plan (sheet 11 of 11 of the subdivision plan) shows two sub-catchment areas labeled DV-A. Based on the stormwater management report, one of the areas should be labeled DV-B; 5, pursuant to Section III.B.3.f of the Regs, two elevation benchmarks are required; the plan (sheet 3 of 11) shows only one benchmark; 6, the soils and groundwater data documented at the site on January 23rd should be included on the plan and the soils profiles documented at roadway stations 2+0, 4+0, 6+0, and 7+90 should be plotted on the roadway profile; 7, the velocities reported for the drainage pipes are for full flow conditions. However, the actual design flow for each pipe should be used to compute the actual flow velocity in each pipe in order to verify compliance with Section IV.B.4 of the Regs.

Mr. Silva stated that he has no issues with the test pit data; as a result of that, they did adjust the infiltration rate and the revised plan address 80% of Azu's comments. He said he was a bit unclear about the comment about the basins coming in from Ashtead and where they have the crossing that is there now...Mr. Etoniru explained. Mr. Silva stated that they found the manhole that was not visible before and they confirmed that the water from Ashtead was flowing to that location; so, in this particular case the drainage had been connected back in the 70's. He said there is definitely a maintenance issue and once they cleared some of the material that was on the down gradient side, they followed that flow and watched it as it came down; what happens is that it goes from across the back of that first property in a channel, but it disappears at the next piece of property. It just becomes overland flow spread over a wider area near wetland flags A 16, 17 and 18...he noted that section of the wetland line they had reflagged in the sub dated plans. As part of the modifications that they included, they are proposing to put an overflow pipe for that channel up high and have that tie over to the road drainage system just as a way of improving what is going on. He stated that the hydraulics in that area

are pretty weak. He said he was there on Monday after we had heavy rains and there was no flow on the up gradient channel which really surprised him; in the down gradient channel, there was very little flow, almost negligible until they cleaned out the outlet pipe and then they could follow flow that was coming out of there. He said there really wasn't that much flow thru that strip. He said he did find plans of how the drainage goes back up to Forest Street. There is a plan that shows the upper Saw Mill Brook and that went across those two lots, so he thinks why this part of the drainage was done was because that is the only way they could free up those two Form A lots back in the 70's, so that part of the drainage was actually reworked. He said there must be some other way that the water goes, or there really isn't that much that contributes to it because there wasn't that much that came down after a pretty significant rain fall. He said there is a lot of maintenance that needs to be done in the catch basins out at Ashtead, the manhole at Ashtead, the manhole they uncovered and the cross pipe that goes under the road. Mr. Silva said that as far as the change in the infiltration rate, they had done test pits in the first basin before, but hadn't done them in the second. When they did it, it clearly showed that there was a silt layer that was shallower in that area. They made a couple of changes in the first basin in terms of how they are throttling it around and how there will be protection for the existing system. They have a hydraulic barrier that they introduced to make sure nothing is a problem and will add the detail that Azu was asking for. He moved on to the comment that was made about the church parking lot. He said it was developed back in the 70's and had a pipe that went out towards the back...he said he was unclear as to why he should put that into the analysis for this subdivision. He said he did modify the outfall so it works better with the basin on the revised plan. Her asked Azu to clarify. Azu said he has existing conditions and the watershed on the plan goes around the perimeter of the property. If you look in the regulations, it requires that you account for offsite drainage both upstream and downstream. There is no consideration in the report that he has of how much water is coming in and what effect this proposal will have on the upstream and downstream. ; it has to be documented. Azu and Larry will discuss this further. Tom Bergeron, later on in the hearing, mentioned that the catch basin from the parking lot wasn't part of the original plan; he said the Town asked him to put it in because there was a concern expressed by South Street neighbors.

Mr. Driscoll asked Mr. Silva what changed with the drainage design: Mr. Silva said essentially the same; a slightly different configuration; nothing of any substance. They tried to make it so it met the infiltration rates they agreed they should be. They tried to better account for that pipe that is coming from the church parking lot and to bring it across. The pipe they had coming from the first basin to the second is being brought straight in from the detention basin area as opposed to going into the sediment forbay. Some calculations were also adjusted. The outlet has been moved so that it is further away from The septic system and is more of a level spreader and from there is an emergency stone over to the left

On a motion by Mr. Sullivan, seconded by Ms. Guarino, it was unanimously voted to continue the hearing to 2/15 at 7:00 pm.

On a motion by Ms. Guarino, seconded by Mr. Hall, the meeting was adjourned at 8:10 pm.

MINUTES APPROVED: _____