

**TOWN OF DUCK
PLANNING BOARD
REGULAR MEETING
January 8, 2014**

The Planning Board for the Town of Duck convened at the Duck Meeting Hall on Wednesday, January 8, 2014.

Present were: Chair Joe Blakaitis, Vice Chair John Fricker, Ron Forlano, Tim McKeithan and Marc Murray.

Absent: None.

Also present were: Director of Community Development Andy Garman, Council Liaison Chuck Burdick and Permit Coordinator Sandy Cross.

Others Present: None.

Absent: None.

Chair Blakaitis called to order the Regular Meeting of the Planning Board for January 8, 2014 at 6:37 p.m.

PUBLIC COMMENTS

None.

OLD BUSINESS

Discussion of Town of Duck Low-Impact Development and Stormwater Ordinance

Director Garman stated that the issue was a continuation from the Board's December meeting, where the Board had decided to allow staff to do a first cut draft of the framework ordinance that was discussed at the meeting. He stated that he and Member Murray met and talked about what might be included in the ordinance and he hoped that the draft ordinance reflected what was discussed. He stated that he showed the draft ordinance to the Town's engineer and that the Town's engineer felt it was well written.

Director Garman stated that the first page of the ordinance included new definitions. The most important new definition included the term "built upon area." He added that it was taken from the State stormwater manual, explaining that rather than using lot coverage, the State uses built upon area in the manual to determine how much impervious surface one has. He stated that any engineer that does this type of work would understand what it meant because they prepare the plans in accordance with the State stormwater manual. He noted that it was a little bit different than the Town's definition of lot coverage in that they count gravel as lot coverage when calculating built upon area, but they don't count wood decks and the surface area of pools. He stated that this new definition was consistent with the definition in the State stormwater manual.

Director Garman stated that the definition of lot coverage was the same one the Board worked on previously when it first started reviewing stormwater regulations and allowances for pervious pavement. He noted that the only change was the new standard for porous concrete under the types of paving materials that were pervious.

Council Liaison Burdick asked if the 5% lot coverage for solar energy systems was consistent with what was in the current ordinance. Director Garman stated that it was and added that he did not change that portion.

Member Murray asked if the purpose of the ordinance with regard to built upon area was that pools would not be counted as lot coverage. Director Garman stated that the Town would use the built upon area standard that was in the State stormwater manual. He thought that pools would be irrelevant because the new ordinance applied mainly to commercial projects. Member Murray asked how the credit would work with regard to obtaining stormwater management. Director Garman stated that a lot coverage tabulation would still need to be done so the pool water would count. Member Murray clarified that the calculation on how to treat the stormwater used the State criteria, but the credit would use the Town criteria. Director Garman stated he was correct. He added that the only reason he put built upon area in the ordinance was for engineers to be able to calculate the volume of runoff that has to be captured with stormwater improvements.

Chair Blakaitis asked if the new ordinance would apply to residential as well as commercial projects. Director Garman stated that it would. He added that in residential situations, the specific stormwater management plan was not required, but would be if one wanted to receive the allowance for a 5% lot coverage increase. He stated that he and Member Murray discussed it and Member Murray took an average 15,000 square foot lot and calculated what a 5% increase would yield. Member Murray explained that he looked at comparable property sales in the area. He stated that if a half million was divided by 4,500 (i.e. 30% coverage for a 15,000 sq. ft. lot), one buildable square foot was worth \$111.00. He stated that he and Director Garman were trying to determine what the value added would be and if it would be enough to motivate people to use the LID stormwater management techniques. He thought that it was.

Director Garman stated that he and Member Murray agreed that it was a big enough motivator to make it worthwhile for people to consider it while not going overboard regarding how much people would be given for lot coverage increase. He stated that an additional 5% on a 15,000 square foot lot would yield an additional 750 square feet in lot coverage. This would be enough to add a swimming pool to most residential sites. Member Murray noted that not all lot coverage was created equal and it was a rough calculation.

Council Liaison Burdick asked what the added value was with regard to what could be put into the property. He further asked if it was an extra \$50,000 that could be put into the property. Member Murray stated he was correct. Council Liaison asked how much would have to be spent to realize the \$50,000. Member Murray thought it would depend since some improvements gave more bang for the buck over others. He thought a pool would be the highest.

Vice Chair Fricker noted that an owner not only had the cost of employing these procedures to qualify for the additional 5% coverage, but also the variable, ongoing costs of maintaining a pool. Member Murray agreed. Council Liaison Burdick pointed out that there were some properties that would not be able to accommodate a pool under these circumstances. Member Murray agreed, adding that it would be invaluable for them. Director Garman stated that the point was brought up last month that the Board should be focusing on doing something that would not only address new development, but provide an incentive for existing development to implement some of these things.

Vice Chair Fricker stated that under the definition of coverage, it stated that paving block was listed but pavers were stricken. He added that Permeable Interlocking Concrete Pavers was listed. He asked what the difference was between them and why pavers were stricken. Director Garman stated that the ordinance was written earlier in 2013. He stated that paving block would be similar to Turfstone. Vice Chair Fricker asked if the phrases would be ones that everyone would understand. Director Garman wasn't sure. He added that he understood what they meant. He stated that Permeable Interlocking Concrete Pavers were specific products. Member Murray asked if paving block could be changed to Turfstone. Director Garman stated that Turfstone was a brand name. Vice Chair Fricker suggested it say "Turfstone or equivalent". Member Murray asked if pavers were stricken for the first time in the draft ordinance. Director Garman stated that it was stricken in the previous draft and added that he did not change any language in that definition. He stated that he could add "Turfstone or equivalent" instead of paving block if the Board wished.

Chair Blakaitis agreed with Vice Chair Fricker's comments. He stated that pavers were the same as paving block. Member Murray agreed. Vice Chair Fricker thought for clarity, Director Garman and Member Murray needed to be in sync with regard to the terms. Director Garman and Member Murray stated that they were happy with adding "Turfstone or equivalent" to the ordinance.

Member Murray clarified that the Town does not give credit for pavers. Director Garman stated that it had to be some type of engineered product with specifications detailing that it was permeable. Member Murray thought the definition of impervious should be changed to add "completely prevents" or strike the word "natural" from the ordinance. He noted that porous concrete prevented the natural infiltration of water. It was *consensus* of the Board to strike the word "natural" from the language.

Council Liaison Burdick questioned the word "clay" in the ordinance. Director Garman asked Council Liaison Burdick if he was suggesting that it be changed in the ordinance. Council Liaison Burdick stated that it would be excluding clay. Director Garman stated that clay should not be used since it wasn't a permeable base material. He noted that the language had not changed and had been in the ordinance for 5-6 years.

Director Garman stated that the concept of LID techniques was to reduce the amount of pervious surface area so if one could reduce the amount of impervious coverage through driveways and parking spaces, it should be done. He stated that because of that, he included a reduced parking stall dimension and later in the ordinance, a reduced drive aisle dimension for commercial properties. He stated that he looked at what was done over the years with regard to Conditional

Use Permits as well as other ordinances and 18x9 was a fairly common standard for parking spaces. He tried to reflect what had been done in the Conditional Use Permit process and the section dealing with commercial design guidelines for driveway widths. He explained that they were normally 24 foot wide if Town staff felt it was necessary for fire department or emergency use access; however, the Town allows people to reduce the driveway down to 20 feet in areas where it may not be used for that. He stated that staff would look at it on a case by case basis, but the goal was to require what was needed and no more than that.

Chair Blakaitis clarified that the parking requirements were Town-wide for both residential and commercial. Director Garman stated that he was correct. Chair Blakaitis stated that the Town would be changing the parking requirements for any house that was constructed or renovated if the ordinance is adopted. Director Garman stated he was correct. He noted that it was a fairly big change and was a matter of looking at it two ways – is it enough or do we not want to change it because it would create bigger homes? He felt the size was adequate; adding that the Town engineer felt it was an adequate size for parking spaces. Chair Blakaitis thought 18x9 feet parking spaces were fine. Member Murray thought it was plenty.

Director Garman stated that under Off-Street Parking Requirements, he added “and driveway” as a housekeeping item to clarify that the parking plan should show the driveway. He stated that Item H was a new item that was added, but was fairly general language. He added that he did not add a lot of specific things as to how it would be administered, but the concept was that a driveway should not be designed so that runoff drains to the street or adjacent properties. He explained that if the elevation of a house was above the street, a homeowner would either have to pitch their driveway, put in a trench drain at the end of the driveway or put in an angled apron so the water flows off to the side. He thought there have been a lot of driveways built in Town that drain right to the street. He wasn’t sure if the Board was comfortable with the language being so general and letting staff review each residential site plan to make sure the owner has something built in that ensured it. He felt staff could do that and added that there were general standards like it throughout the ordinance in various places. Member Murray felt it was a good starting point.

Vice Chair Fricker didn’t think the Board wanted to micro-manage homeowners. Member Murray thought it was good language for the ordinance. Director Garman stated that when staff reviews permits, they typically go out and perform a pre-permit inspection of the site to see what the conditions were, to decide what questions needed to be asked as the applicant moves through the permit process. He added that it would not be an issue if a house sits two feet below the street. Member McKeithan noted that it gave staff the authority that was needed.

Council Liaison Burdick asked how the standard would apply to existing homes. Director Garman stated that if they were adding parking or making major changes to a driveway, staff may require the owner to retrofit the driveway to meet the requirement. Council Liaison Burdick noted that some people may have a hard time with some of the driveways. Director Garman agreed, adding that they could put in a trench drain to allow the water to flow off to the side. Council Liaison Burdick reiterated his question as to how the standard would apply to existing homes. Member Murray thought a drain could be put in and if it didn’t drain all of the water, then so be it. He added that it was an effort to reduce the runoff. Council Liaison Burdick asked Member Murray if he thought it was reasonable. Member Murray thought it was and if the water

could be moved to the side of the driveway, it would at least improve the situation. Director Garman added that if staff thought the runoff would be severe, they could require some type of stone or rip-rap to help the water drain off to the side to reduce the velocity of the water. Member Murray stated that if the owner could not stop the runoff at its entry into the street, at least they could slow it down and spread it out at the entry point.

Vice Chair Fricker asked if Director Garman wanted to modify the language as a new subparagraph H to say: "...driveway and parking areas shall be designed to the extent practicable to prevent the direct flow of stormwater..." Director Garman stated that he did. Vice Chair Fricker thought it would protect the Town.

Member Murray thought the Town needed to be clear regarding stormwater on new projects. He thought if a property was higher than the adjacent property, a contractor would not be able to repair the natural drainage patterns, particularly when development is not being done in that area. He didn't know if the language needed to go in this section of the ordinance. He added that with the suggested language, it opened the Town up to complaints from adjacent homeowners when they see water coming off their neighbor's driveway and into the road. He suggested putting some language in to protect the Town. Vice Chair Fricker stated that the Town would tell the person doing the construction that the Town was not trying to be draconian with the rules. Director Garman stated that that section applied to commercial projects. He suggested the following language: "...parking shall be designed so as to not drain..." He added that a parking lot would not be designed to drain to the nearest property, but to drain to whatever stormwater infrastructure is put on the site, since it was a commercial project.

Member Murray suggested putting in language in the residential portion of the ordinance so that the Town did not have to defend itself against a complaint from an adjacent homeowner who felt like they were being subjected to stormwater runoff from their neighbor, when they were being subjected to the natural water. He wasn't sure if "to the extent practicable" was giving enough of an out for that situation. Director Garman thought the way it read, "...shall be designed to the extent practicable..." did not say that there should not be any flow of runoff to the adjacent properties, just that it should not be designed so that it flows to the adjacent properties. He thought it was fine the way it was written. He stated that if there was always a drainage issue from a higher lot to a lower one, it would cover it.

Director Garman stated that under Section D, he added a sentence to reference another section of the ordinance, which was a housekeeping item. He stated that there were two sections of the ordinance that discussed paving materials and he wanted to make sure there was a cross connection between the two sections.

Director Garman stated he created the same connection in Section E in that he referenced 156.113, which contained the new stormwater requirements. Chair Blakaitis asked if pavers should be clarified in the ordinance. Member Murray stated that pavers could be used but they would count as 100% coverage.

Council Liaison Burdick asked why the Town was not promoting gravel. He added that it was being promoted in single family dwellings. He asked why it wouldn't be promoted elsewhere. Member Forlano asked if Council Liaison Burdick was talking about commercial settings.

Council Liaison Burdick stated that he was. Member Forlano thought there would be a problem with heavy trucks on gravel driveways in commercial settings. Council Liaison Burdick stated that other commercial settings had gravel and it wasn't a problem. He thought gravel was a better solution instead of forcing concrete driveways. Chair Blakaitis stated that it was less expensive for a porous surface. Council Liaison Burdick stated that there were places where it did not apply and that meant that the engineers would need good design sense for where gravel would or would not work.

Director Garman thought there was a disconnect between A and B in the draft ordinance. He added that in A, it stated that "all driveway and parking aisles shall be improved with asphalt, concrete, or pavers" and in B, it stated that "the Town encourages use of pervious materials and new technologies". He wondered which it should be. Council Liaison Burdick stated that he wasn't sure. Member Murray stated that gravel was not considered permeable anywhere else. He thought encouraging permeable concrete was good. Council Liaison Burdick pointed out that the problem with gravel was when clay was put under it. Director Garman thought that for commercial sites, they either had impervious surfaces or newer, engineered pavement materials that could be pervious but still engineered and would withstand heavy traffic. Member Murray agreed, adding that gravel without clay underneath would not work. Director Garman stated it would not be adequate. He noted that the older sites in Town were likely to have crush and run under the gravel.

Director Garman sensed that the Board wanted to encourage pervious materials so long as they are engineered to withstand heavy traffic. Member Forlano thought that the only way pavers in commercial settings would work was if they were put over a tamped surface to maintain the strength for heavy vehicles. Council Liaison Burdick noted that it cut down permeability. Director Garman wasn't sure if pavers would be a pervious surface or not. He added that there were regular paving blocks and then there were the permeable interlocking concrete pavers, which was more of an engineered product that was designed to be permeable. He stated that they would have a specific detail that would have to be followed for installation.

Director Garman noted that when you start looking at stormwater, built upon area would have to be looked at so the gravel would not be considered permeable. He noted that the State did not count the GravelPave that the Town used in its parking lot as a permeable product because of the webbing. Member Forlano stated that his experience with pavers over fine grain, tamped surface was that it was permeable. He stated that even though the Town is saying it's not permeable, it was. He added that he did not agree with what the Town or the State said; it was permeable. Chair Blakaitis stated that the material itself was not permeable, but the spaces between the pavers were.

Director Garman wondered if the Town was doing a site plan, the Planning Board would review it and if someone wanted to do pavers or concrete, how the Board would react to it. He thought the Planning Board would prefer pavers. Chair Blakaitis agreed. Director Garman stated that the question would then be if the applicant would receive any credit for using pavers towards their stormwater requirement. He added that staff and the Board would look at how it was calculated as built upon area and then it would fall back to the State requirements. He stated that the applicant would have to obtain a State stormwater permit if they were adding more than 10,000 square feet of built upon area to a site, but would have to get a Town stormwater permit if they

were adding one square foot of built upon area to a site. He stated that the Town engineer would be reviewing it and making his own determination about the permeability of these products.

Chair Blakaitis stated that the Board was not sitting at the meeting determining the permeability of these products; they were saying what someone could use. Director Garman agreed. He added that staff would review it and the Town engineer would look at the engineering of the typical sections they provide and decide how much credit should be received. Member Murray thought a new product could come out and in that case, the Town would look at it on a case by case basis. Director Garman agreed, adding that the ordinance stated that the Town encouraged the use of pervious materials.

Chair Blakaitis didn't see why any changes were necessary to the ordinance other than what was included. Director Garman stated that the only changes he made to the section were the items that were underlined. He added that he pulled it from a State requirement that did not apply in a coastal area, but when the State adopted the new stormwater rules, there were additional rules developed in other parts of the state that said that they would require no more than 80% of the surface area of parking areas and drive aisles constructed with impervious materials. He noted that it gave the Town some way to require some pervious options.

Director Garman stated that at the bottom of the same page was more housekeeping to make adjustments for the drive aisle widths. He explained that drive aisles could be a minimum of 20 feet, but during the fire department review process, the Fire Marshall and Fire Chief had the ability to require a 24 foot wide drive aisle in cases where it was deemed necessary. He noted that 20 feet was the minimum standard and 24 feet would only be required if the fire department felt it was necessary in order to navigate the site.

Member Forlano asked if a one way driveway could be 12 feet all the way. Director Garman stated that it could. Member Forlano asked if he put a 20 foot one way driveway in, it would allow him to parallel park vehicles on one side of the driveway. Director Garman stated that it would if it was 21 feet. Member Murray pointed out that it would be allowed, provided that the fire department did not need to access the drive aisle. Director Garman stated he was correct.

Director Garman stated that on Page 4, under Dead End Drive Aisle, he suggested striking through #5 since it was serving one-way traffic in a dead end driveway.

Director Garman noted that Section 156.113 was a big change and was duplicated in other sections. He explained that if there was a new commercial site, a stormwater system would need to be designed. He noted that the Town has required this in the past. He stated that it would need to be built to capture a 1.5 inch designed storm. Member Murray asked if the requirement was from the State requirements. Director Garman stated that it was, adding that it was designed to be consistent with the State requirement. He stated that it applied to all projects instead of those that meet the State threshold. He stated that the rest of the language stated that the Town would rely on the State stormwater manual and the standards the State has already established for its design guidelines and to guide individuals.

Director Garman stated that #3 basically stated "...to the extent practicable..." He wasn't sure how people would feel about the phrase. He further read the language as: "...project designs

shall utilize low-impact development principles...” He stated that the language would also be in the new manual that will be coming out. He stated that there will be cases where it may not be practicable for someone to do low-impact development and during the site plan review process, they would have to prove it to Town staff. He thought the Town needed to leave itself an out in case staff has to approve something other than low-impact development. Chair Blakaitis noted that with the Twiddy project, the Board got into that and they had an out. Director Garman agreed, adding that this language would push people into a low-impact development site unless they can prove to the Town that they could not.

Vice Chair Fricker thought the Town had the burden of proving that it was practicable, whereas if it was put in the negative, then the builder would have the burden of proving it. Chair Blakaitis thought the language should be stronger. Vice Chair Fricker asked if the introductory phrase for #3 should read: “...unless deemed impractical...” Council Liaison Burdick suggested that the language read: “...unless demonstrated impractical by the developer...” Vice Chair Fricker thought it should be by the applicant. Director Garman stated that he would prefer to add the language to the end of the sentence so it would read: “...project design shall utilize low-impact development principles...” and at the end after the word stormwater, it would read: “..., unless deemed impracticable by the applicant...” Council Liaison Burdick corrected Director Garman and stated that deemed should be changed to demonstrated. Vice Chair Fricker agreed. Director Garman made the change. Vice Chair Fricker clarified that it would be changed each time where the five criteria were listed. Director Garman stated that it would.

Member Murray asked if the 1.5 inch was within 24 hours. Director Garman stated that it was for a 24 hour designed storm. Member Murray thought the Town was getting that type of storm event at least twice during a summer. Director Garman agreed. Council Liaison Burdick noted that the Outer Banks gets it year round. Member Murray thought the Board may want to consider upping the amount. Director Garman stated that the Board could. Member Murray suggested creating an incentive to get an applicant to design a larger stormwater system. Chair Blakaitis thought it would be hard since the State has a standard. Director Garman noted that most local ordinances exceeded the State requirement, adding that the Town of Nags Head’s was 4.3 inches.

Council Liaison Burdick asked what the other towns had in place for their requirements. Director Garman stated that 1.5 inches was the standard. Member Murray stated that if the Town went to the LID technique, the burden on the applicant would be lower since LID techniques were more spread out and less expensive. He added that if that was the case, it seemed that the Town could raise the threshold. He suggested creating zones in the Village Commercial District where it was a problem and if it wasn’t a problem, the standard could be 1.5 inches. Director Garman stated that the 1.5 inches was designed to catch the first flush of sediment on a site. He added that one of the reasons why there wasn’t a lot of flooding in the Village Commercial District was because of the drop inlets that run to the Sound. Member Murray thought that was a huge problem. Director Garman stated that he was not comfortable debating how much would be required without the Town engineer present since there were pros and cons to doing both along with unintended consequences over requiring a lot of stormwater.

Chair Blakaitis stated that if the Board wanted to finish the draft ordinance at this meeting, they couldn’t because they didn’t have enough information. Director Garman suggested having the

Town engineer come in for a discussion at a future meeting. He did not expect the ordinance to be finalized at this meeting. He thought the Town could stick with the 1.5 inch for residential use regardless because there was a much lower level of lot coverage allowed. He noted that the Town of Nags Head requires 4.3 inches for commercial and not residential uses.

Director Garman wondered at what point the Town required sites to install stormwater. He stated that new or redeveloped sites would be required to do so. He wondered if for an existing commercial site it would be required if one parking space was added or for the entire site. He asked the Board if a threshold should be established. He thought 1,000 square feet of built upon area for existing sites would be fine. Member Murray asked if it was for the gross floor area. Director Garman stated that it would be just for built upon area. He stated that it did not make sense to require stormwater for a minor improvement to a site.

Vice Chair Fricker stated that the issue was being raised but was not anywhere in the draft presented. Director Garman stated he was correct. Vice Chair Fricker clarified that if it was to be addressed, it would be in Section 156.113(E). Director Garman stated he was correct. Vice Chair Fricker asked what the best way was to raise the right questions, have data and have some of the issues flushed out between now and the next meeting. Director Garman stated that he wasn't suggesting that the Board do it now, but thought he could come back with a report at a future meeting. He stated that he will have the issue addressed and come back with additional information at the next meeting.

Vice Chair Fricker stated that in the same section, subparagraph 4, it needed some parallel construction to the language. He suggested adding the word "professional". He asked what the difference was between detention and retention pond in subparagraph 5. Chair Blakaitis thought they were the same thing. Director Garman thought there was a difference. Chair Blakaitis thought a detention pond would hold the water back from flowing. Member Murray thought a retention pond dried out. Director Garman thought one retained the water indefinitely, adding that he would check on the language.

Director Garman stated that he added language to Section G to provide redundancy since it was in the ordinance earlier. He stated that he would add the language: "...designed to the extent practicable..." to match the other section. He stated that guttering and rooftop collection systems was added to Section I as a general standard.

Director Garman stated that he would try to have the Town engineer at the Board's next meeting as well as discussion points for the design standard and information regarding thresholds for existing sites.

NEW BUSINESS

None.

APPROVAL OF MINUTES

None.

OTHER BUSINESS

None.

STAFF COMMENTS

Director Garman noted that the January Council Retreat dates have been changed to February 19-20, 2014. Council Liaison Burdick stated that Council could not get a date narrowed down because everyone was moving in different directions so it was moved back to the original date. He added that he would not be attending the Retreat.

BOARD COMMENTS

Vice Chair Fricker stated there has been a lot of news lately regarding the insurance rates being proposed to go up for homeowners. He stated that there was a forum on Thursday, January 9, 2014 at the Kill Devil Hills Town Hall at 7:00 p.m. which Willo Kelly would be making a presentation. He stated that he would be attending the forum. Chair Blakaitis stated that he would like to go as well. Council Liaison Burdick stated he would be attending.

ADJOURNMENT

There being no further business to discuss, Chair Blakaitis adjourned the meeting. There was no vote.

The time was 8:08 p.m.

Approved: _____
Joe Blakaitis, Chairman