

Special PB meeting – May 16, 2006

Andy, chan, john, and karyl

Paul, gino and Susy . . . also Gary Jacob

Low Impact Development – Paul Carter

Handouts for reference purposes – full set of the LID toolkit handouts . . . also distributed a checklist for regulatory review that I thought might be good . . .

Paul's May 12 letter identifying where LID techniques could be incorporated . . .

Paul – runs through the LID techniques

Bioretention Area – shallow vegetated areas with permeable soils

Cisterns and Rain Barrels

Grass Filter Strips

Green Roofs

Infiltration Trenches and Dry Wells

Permeable Paving

Roadway and Parking Lot Design

Low Impact Site Design

Vegetated Swales

Board discusses relative merits of various techniques

Karyl – if we have a similar situation to some of the projects we have in front of us – that proposes a swale system that is going to direct and infiltrate water – how are they used?

John – it seems to me like they are coming to us and asking us to design . . the design should be presented with a combination of the tools and VHB reviews for whether it is sufficient

Andy – I will share with you a comment – I think they are dividing and conquering their way to what they want – taking our temperature constantly – lengthening out this process longer than it should be – in some cases they are bad mouthing

John – if a plan comes to us, it should have their full plan

Paul – plenty of stormwater management measures – more conventional – even if they use these, they still have to meet the DEP stormwater standards . . . they have to submit the design and the calcs that it meets those standards

John – at what point do they submit those?

Paul – we see them on Restaurant 45, Applegate Farm ,

Andy – that is the way it should go . . . River Bend and Marian – the engineering that came in is evolving as we speak – some of it is the Charles River Watershed and some of it is because of the consultants they chose . . . how do we as a board deal with this kind of stuff?

Paul – they need to submit the design info and plans

John – am I overstepping my bounds if I was to ask them where is there water plan

Paul – they need to make a reasonable judgement as to what the PB is interested in and then design to that – they have to make a decision what they are going to engineer –

Susy – I think we have a flaw in the ARCPUD process – perhaps we need to look to the 2 step process from the OSRD

Karyl – I don't see how we can issue any permit based on any number if we don't know how the water works

Chan – I don't think you can force anybody to use the LID techniques – we just have to be prepared to change our rules and regs to allow – some of the things we have done in the past have limited these options –

Susy – they still have to meet performance standards – this is about more options

Andy – goal is to get more onsite infiltration – if we incorporate these items into our rules and regs we will score better on grants . . .

Chan – isn't the major area of concern using

Gary Jacob – water quality issues and reduced flooding – you also slow the movement of water from the site to the rivers – less downstream flooding - makes water more available in the summer as water is replenished into the aquifer

Chan – let's go thru each type and see what information is here . .

### **Cisterns/rain barrels**

Gary – some towns are requiring reuse of water for toilet flushing

Chan – gilette stadium

Gino- Wrentham outlets

## **Grass filter strips**

Chan – primarily used for commercial developments

Paul – you still have to treat the runoff – it doesn't take care of the whole issue – more of a pretreatment – most of these don't provide water quantity mitigation –

Gary Jacob – grass filter strips can be used on top of a bioretention area

Paul – could also be combined with an infiltration trench and dry well

## **Green roofs**

Chan – certainly for commercial or industrial uses . . . tends to be more expensive – flat roofs

Gary – you could use it at River Bend for the 3 story building – reduces air conditioning costs – can build a larger building

## **Infiltration Trenches/Dry Wells**

Paul – you guys have been seeing this – Restaurant 45 is using for infiltration and underground storage

John – these can be under the blacktop

Gary – you should ask for numerous tests – like a septic test . . .

John – issues of long term maintenance

Chan – I have always been a fan of bringing in the DPS director into any discussion - whether you go along with his opinion, that is another matter – I have always been public works oriented – serious consequences to the town's budget

Andy – some of these methods may create expenses for DPS that they may not be prepared to do

Gary – you have to be able to maintain it . . .

ASK DAVE for some input on these techniques . . . when to allow – where to allow – on sites vs. in subdivisions . . .

Gary – go to some places that are doing this and see how it is working

## **Permeable Paving**

Paul – good for pedestrian and low speed and overflow parking areas . . don't want it in high traffic areas as there are load bearing issues – has potential for clogging – recommend that it be vacuumed –

Gary – standard ways of doing it

Andy – if we were to selectively adopt some of these, would that hurt our status with the state

Chan – I don't see using permeable paving for streets – it would only come in with commercial sites . . .

Gary – you can work with concom on these things re: activities within 100 feet of the wetlands

### **Roadway and Parking Lot Design –**

Road widths, sizes of parking stalls,

Our road classification is pretty good

John – we want to make sure that they know they can do this

Paul – if it is appropriate you want to allow it but they still have to show that it works –

John – do we want to just allow these techniques or encourage them

### **Low Impact Site Design**

### **Vegetated Swales**

Roadside, site swales – surface conveyance systems do take up space – they can have dams in them

Kalryl – good idea in the right situations – when are they not good

Paul – swales are a rural drainage concept – where you have built up areas where land is at a premium and you don't have land, you go to curbs, pipes, etc. –

Paul – swales may need more right of way - easier to incorporate into a commercial development site

Gary – you lose trees when you have to clear it a wider area for the roads

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Andy – they need to propose early on what kind of drainage design they intend to have . . .

Andy – coming up with a formula of upland to the site – X % of land area around the houses

Karyl – are we OK philosophically to go toward these techniques – seems to encourage water near the houses – are they going to end up being small detention ponds in a weather situation like we are having now

Gary – if you have lots of swales, then each one doesn't have that much

Andy – do we know where these are working?

Gary – there are a lot of them in Summer Hill

Review VHB's letter -

Paul - Right now they can ask for a waiver from the regs to do LID – or you can start to list them and make them by right . . .

Karyl – we want to encourage some of these techniques

Susy – concern seems to be with vegetated swales being so close to houses – address this problem by requiring larger distances between buildings in ARCPUDS/OSRDS when swales are proposed . . .

Paul – there is nothing in the ARCPUD that precludes these techniques from being used –

Gary – require them to do perc tests for each swale and if they have to use the manufactured soils

Chan – I don't think we have to make any changes right now – we are making mountains out of molehills

Andy – the intent of these techniques

Giono – remember you require catch basins and piping and such – somebody - these techniques would be available but they have to show they have to work

Chan – if they don't put a workable system on the table, you don't have to approve it

Gino – paul is saying

Chan – I don't think we should even lead them that far . . .

Paul – these would be available but subject that they still work

Andy – purpose of this work is part of the smart growth grant –

Chan – I didn't realize that this is part of the grant . . .

John – I feel a sense of urgency to encourage or suggest to developers that we are willing and encouraging to hear some of these LID techniques brought into their plans – we need to suggest to the builders that they consider – just list it in the regs as options

Andy – I would ask that when Paul does his next step, show the text changes

Chan – if we are reacting to a grant, I am sorry I missed that, I take another tack – then what Paul suggests

Chan – developers will be 10 years ahead of you in terms of doing something cheaper – they will want to do anything to save a buck . . .

Karyl – I think they are already way ahead of us . . .

Gary – there are certain people in town that want to do no waiver plans cause of ease in getting thru the review process

Andy – does Paul need some direction from us on what should be by right vs. discretion

Paul – yes . . . these changes would be to allow things by right . . .

Gino – the fact that the techniques would be listed doesn't mean they will get to use them

Pros and cons of vegetated swales

Paul – they haven't proposed parallel roadside ditches – that would require culverts under the driveways –

Gary – there is one version that is a happy medium – only convey sidewalk water and snow melt in these swales and don't try to put roadwater into the ditches –

Paul – would need bigger ROW to do this; they take up a lot of space -

Andy – cost of land is so expensive

Paul – that is why you don't see it around here . .

Chan – I would propose that we not allow roadside swales . . otherwise we will get backed into a situation that we will not be happy with

Andy – purpose of the grant is to consider the techniques and see where they fit . . .

Paul – sounds like board is not comfortable with allowing roadside vegetated swales –

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Site Plan Rules and Regs

Review . . . VHB letter of 5/12/06

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Gino – Commercial Redevelopment Plan Project

Handout dated 5/16/06 –

Briefing for property owners ???? – daytime schedule . . .

One general briefing -

One on one with Finklestein, Diversified, Cassidy, Medway Coop, Gould,

Thanks for staying late . . .

Awesome

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Motion to close 11:25 pm -