# S.B. Church Memorial Town Hall 486 Oxford Road, Oxford, Connecticut 06478-1298 www.Oxford-CT.gov 

## Oxford Conservation Commission Inland Wetlands Agency

## REGULAR MEETING MINUTES

Tuesday, September 9, 2014

The Regular Meeting of the Oxford Conservation Commission/Inland Wetlands Agency was held in the Main Meeting Room of the S.B. Church Memorial Town Hall on Tuesday, September 9, 2014.

Meeting was called to order at 7:31 P.M. by Acting Chairman Sue Purcella Gibbons

ATTENDANCE ROLL CALL: Acting Chairman Sue Purcella Gibbons

COMMISSIONERS PRESENT: Bill Richter, Tom Adamski, Ethan Stewart
STAFF: Also present: Denise Randall Administrative Secretary and I/W Enforcement Officer Andy Ferrillo Jr.

## ABSENT:

Chairman M. Herde

## AUDIENCE OF CITIZENS (NOT FOR PENDING APPLICATIONS) None

## AMENDEMENTS TO AGENDA:

None

## NEW BUSINESS:

Tetlak Park, Bowers Hill Rd, (Aggie Park), proposed Athletic Field, Application submitted by Brian Nesteriak, Map 14, Block 55, Lot 122
Mr. Brian Nesteriak (Engineer) stated: The last time I spoke with the Commission there were some concerns about pollutants and fertilizer and this map may not look any different but the here to explain the function and elements of this design has now changed. We had a bioretention basin here (pointing to the map) and the primary reason for that is water coming off the access drive and the parking area will have a direct treatment center for that. The rest is all vegetated and the really the only thing to worry about is suspended solids and fertilizers which won't be done until about May. The old drainage which will take care of any excess water that the top soil doesn't need off of the field and it is designed for more than an inch to clear the field within an hour of the rainstorm. There is perimeter drainage that goes around and collects this drainage and also drains that collect any water on the site on the fields. It all goes to one specific area large area here (pointing to the map) and is called a water quality soil and it's been designed accordance with the D.E.E.P. manual and E.P.A. Manual and Soil Erosion manual. Basically what this is, is 1 and half percent soil with check dams. There are 4 of them in all and what this creates is a bunch of pools and within this swale is all engineered vegetation that are specifically designed not only to be able to handle occasional non-invasive water but they also allow for leaky things, things that have been known to pick up the water and allow for collection of heavy metals, nutrients and hydro carbons. I will like to add this that the theory behind this is very similar to the theory behind the bio-retention basin. The bio-retention basin has an engineered media which has 30 inches of sandy top soll, specifically and that allows for the water to infiltrate in the ground and filter out any solids or heavy items. (pointing to the map) We have a level spreader on here about 28 feet long and also engineered based on the soil and erosion manual and this will slow the flow, spread it. Again everything was put into a storm drain report and submitted to Nafis and Young (town engineer) and all of you have Nafis and Young's letter which I received this afternoon and I do have a response letter which I will get too soon.

Commissioner T. Adamski asked: The level spreader, what keeps it level?
Mr. Nesteriak replied: Its modified rip rap. It's designed excavated out but completely level and designed with the thickness of the rip rap.
I.W.E. Officer A. Ferrillo added: Water will run through it, not over it.

Mr. Nesteriak replied: Yes. Its one foot deep with modified rip rap is about 8 inches in diameter.
Commissioner T. Adamski asked: What is the maintenance on this?
Mr. Nesteriak replied: The level spreader is like every level spreader in town, needs to be checked periodically, once a year, silted up and cleaned out. Now that being said, we have a vegetated swale with pools and this entire thing is working as one unit so if there is any solids that clog, you can see it and will end up in the forebay or one of these pools.

Commissioner E. Stewart asked: Is there access to the field?
Mr. Nesteriak replied: There isn't any specific access right now, but you can get down there from the field.
1.W.E. Officer A. Ferrillo stated: The town will probably need so type of path, some kind of defined access way through there for maintenance.

Mr. Nesteriak replied: That can be designed in.
Commissioner T. Adamski stated: We will have to have some sort of condition to inspect annually for maintenance.
I.W.E. Officer A. Ferrillo agreed.

Mr. Nesteriak stated: Yes, it's the maintenance that keeps these things working.
Commissioner T. Adamski asked: What do we know about the soil underneath the swales?
Mr. Nesteriak replied: There are a variety of soils. We did test borings but budget was always a concern so someone was nice enough to donate a boring machine. The bio-retention basin was actually were designed for the 100 year storm so the soils underneath are not necessarily a factor because the under drain itself is really acting as a filter as oppose to infiltration.

Commissioner T. Adamski stated: My concern with infiltration, and I think I mentioned this last time would be the plants as there is no drainage.

Mr. Nesteriak replied: Yes. The test boring here (pointing to the map) on the hill showed ground water between 6 and 7 feet down and in some cases it was 10 to 12 so infiltration factor of this helps.

Commissioner B. Richter stated: That area is going to be pretty active if it has no drainage.
Mr. Nesteriak replied: Well, we are putting in drainage, so one of the primary reasons is so we don't have these problems. The only other option in order to make this work, if say we find infiltration isn't an option is placing an under drain in here (pointing) and then allowing another discharge some where else downstream. You lose the infiltration factor but you still gain the filtering.
I.W.E. Officer A. Ferrillo asked: What is the distance between there to that brook that is quite away down that slope?

Mr. Nesteriak replied: This is an active brook and I'm pretty certain it flows all year long. Commissioner T. Adamski asked: Do we have an increase in volume?

Mr. Nesteriak replied: There will be a modest increase in peak flow because you're going from vegetated to non-vegetated.

Commissioner T. Adamski asked: There are calculations in the report?
Mr. Nesteriak replied: I did not put them in but 1 could.
Commissioner B. Richter asked if there were anymore test pits done.
Mr. Nesteriak replied: Not in the areas of the bio-retention basin or the water quality swales but if this is a condition and we need to do it, the town will somehow figure out how to get it done.
1.W.E. Officer A. Ferrillo stated: The volume of water coming off might be important to the town engineer and if he sees that the volume you are projecting to come off is not that great and what you're showing that you can infiltrate just with the media you're putting in there. That might be sufficient.

Commissioner E. Stewart asked: Is the media 30 inches?
Mr. Nesteriak replied: Yes, 30 inches which is the sandy top soil so the plants can grow well but water can filter through.

Commissioner E. Stewart asked: So with that channel, will it hold 1 inch of rainfall going into that channel.

Mr. Nesteriak replied: Yes. It's been designed for a 10 year storm and it passes the 100 year storm.

Commissioner E. Stewart asked: When you say it passes, is that before the actual discharge to the level spreader itself?

Mr. Nesteriak replied: It's designed so that it can pass the 100 year storm so that we don't have erosion problems. The typical standard to design a water quality swale is the 10 year and essentially anything over 1 inch is all excess water. It's only 2 feet deep and 18 feet wide, very wide, very flat and very shallow so that it allows long term interaction in the storm water and in the plans and in the media. It's been designed to be 15 CFS.

Commissioner T. Adamski asked: What's the grade on the level spreader?
Mr. Nesteriak replied: The water quality swale is at 1 and half percent.
Commissioner T. Adamski asked: What about at the end of the swale?
Mr. Nesteriak replied: (Pointing to the map) This is 378.5 down to 374.5 and this is at 0 percent and it's designed so the water can be slowed down so that we don't create erosion problems. And again the 4 check dams, pointing to the map, are located here.
I.W.E. A. Ferrillo Jr. asked: I know money is always an issue but is there a potential to fence off there area so that it doesn't become a foot traffic or an off road vehicle area?

Mr. Nesteriak replied: I don't think anybody is really going to want to go there with this 2 to 1 slope and I know it's been important to the Commission with the trails here so up further is a passage way and need to continue to allow that access.

Commissioner T. Adamski asked: The other issue is the off-road vehicles that can go on the field itself.

Mr. Nesteriak replied: I know an off-road vehicle can do it but it wouldn't be tremendously easy with a 15 foot drop.

Commissioner T. Adamski asked if we could add the litter control standards.
Mr. Nesteriak replied: Yes, absolutely. I would like to go over my response to Nafis and Young.

Commissioner B. Richter asked: What about the fertilizers?
Mr . Nesteriak replied: That is what the water quality swales will be taken care of. Not that this matters but I don't think the town fertilizes any of the fields now.


September 9, 2014

Mr. Michael Herde, Chairman
Inland Wetlands Agency
486 Oxford Road
Oxford, Connecticut 06478

## RE: "Aggie Park" Athletic Complex Oxford, Connecticut

Dear Mr. Ferde:

In response to the comments by James Galligan in his letter to you dated 9/8/2014, I offer the following (numbers correspond in kind to his numbered comments):

1. The storm sewer calculations for lines $9 \& 10$ show that the pipes will be surcharged during the 100 year storm, however, the elevation of the storm water will not be above the grate elevation of the structure. This is an acceptable condition.
2. Test pit and groundwater information is not available at this time in the area of the bioretention area. However, it is also not needed since the basin has been designed with an underdrain connected to the storm drainage system.
3. A detailed construction sequence has been attached to this letter. This will be included on all subsequently revised plans.
4. Bioretention basins are an effective method in removing total suspended solids, particulates, and treating hydrocarbons and heavy metals that may be in the storm water. The basin has been designed in accordance with the methods outlined in the 2004 Stormwater Quality manual which is to say that it can hold and contain at least the calculated Water Quality Volume for the contributing watershed area. In addition, the basin was designed with the stone diaphragm and the grass filter strip, which are considered optional components. A bioretention basin will typically remove at least $80 \%$ of the total suspended solids. However, with the additional pretreatment components of the diaphragm and the filter strip, I estimate that at least $90 \%$ will be removed.
5. The crushed stone diaphragm is a typical standard that is recommended for initial treatment of runoff from paved and gravel areas. Its primary purpose is to allow settlement of larger size particles. The 2004 Stormwater Quality manual specifically recommends the use of sone diaphragms for parking lot drainage.
6. As included on the application, the anticipated upland review area to be disturbed is 0.65 acres.

If you have any questions, or would like to discuss anything further, please do not hesitate to contact me.


Cc: James Galligan, Nafis \& Young Engineers


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## CONSTRUCTION SEQUENCE

## INIIAL GENERAL PHASING

. HOLD PRE-CONSTRUCTION COORDINATION MEETING.
2. INSTALL CONSTRUCTION ENTRANCE.
3. FLAG LIMITS OF CLEARING OF THE SPECIFIC PHASE.
4. INSTALI SILT FENCE AND HAYBALES.
5. ESTABLISH TEMPORARY STAGING AREA FOR ANY EQUIPMENT TO BE USED.
6. CLEAR. CHP, OR LOG THE SITE TO THE FLAGGED LIMITS OF CLEARING.
7. STUMP ONLY AREAS BEING WORKEO ON WITHIN A ONE WEEK PERIOD.
8. DISPOSE OF STUMPS AND BOULDERS IN ACCORDANCE WTH TOWN ANO STATE REGULATIONS.

PHASE I-INSTALL ACCESS DRVEWAY

1. STUMP AREAS WITHIN PHASE I WORK EXTENTS.
2. STRIP ANO STOCKPILE TOPSOIL INSTALL SILT FENCE AROUND STOCKPILE AND SEED.
3. ROUGH GRADE ACCESSWAY.
4. INSTALL PROCESSED AGGREGATE AND COMPACT.
5. TOPSOL SEED, \& MULCH ALL SIDE AREAS.

PHASE 2-MAVOR EXCAVAIION
2. INSTAL NECESSARY SILT FENCE AND HAYEALES.
3. STUMP AREAS WTHIN THE FIELD EXTENTS.
2. STRIP AND STOCKPILE TOPSOIL INSTALL/MODIFY SLLT FENCE AROUND STOCKPILE AND SEED.
3. INSTALL SEDIMENT CONTROL BASIN UPLAND OF PROPOSED WATER OUALITY SWALE GRADE. PITCH OR TEMPORARILY PIPE DISTUREED AREAS TO THE BASIN.
4. EXCAVATE THE FIEID TO THE APPROPRIATE ROUGH GRADE ELEVATIONS. MOVE EXCESS MATERIAL ON WEST SIEE TO EASTERN FIL SIDE PLACE IN MAXIMUM $12^{*}$ LOOSE LIFTS AND COMPACT TO AT LEAST 95\% OF THE MODIFED PROCTOR TEST RESULT.
5. GRADE ANO STABILIZE BYPASS SWALES LOCATED ON WESTERN SIDE OF FIED EXCAVATION.

PHASE 3-UTIUTY CONSTRUCTION \& FINAL STABLLATION

1. INSTALL STORM DRANAGE COMPONENTS AND UNDERGROUND UTLITES.
2. FINAL GRADE PARKING LOT AND FIELD.
3. INSTAL PROCESSED GRAVEL IN PARKING LOT.
4. SCREEN AND TEST TOPSOLL PREPARE TOPSOIL MXES FOR EACH SPECIFIC AREA. TEST AND SUBMIT TO ENGINEER FOR APPROVAL
5. INSTALL EIORETENTION BASIN. PLANT AND STABILZE IMMEDIATELY.
6. EXCAVATE AND CONSTRUCT WATER QUALITY SWALE. PLANT AND STABIUZE IMMEDIATELY.
7. TOPSOIL SEED \& HAY ALL APPROPRIATE DISTURBED AREAS.
8. INSTALL CLAY SKIN AREA ON SOFTBALL AREAS.
9. MAINTAIN ALL EROSION AND SEDIMENTATION CONTROL MEASURES IN AN EFFECTIVE CONDITION
MHROUGHOUT CONSTRUCTION.
10. ENSURE AL AREAS ARE STABILIZED UPON COMPLETION OF CONSTRUCTION AND REMOVE SOIL EROSION MEASURES.

Mr. Nesteriak stated: The construction sequence will be in the report as well.

OLD BUSINESS:

EXECUTIVE SESSION:

NEW APPLICATIONS REQUIRING OCCIWA APPROVAL (ACCEPTANCE)

## CORRESPONDENCE:

OTHER BUSINESS:

## ACCEPTANCE OF APPROVAL MINUTES \& CORRECTIONS TO MINUTES (IFANY):

MOTION made by Commissioner B. Richter and seconded by Commissioner T. Adamksi to accept the Public Hearing meeting minutes from the $8 / 26 / 14$ with no changes.
All in favor 4-0.

## ENFORCEMENT OFFICER:

1.W.E. Officer A. Ferrillo stated: The owner of BUI, Inc (the brewery) would now like to add a $28^{\prime}$ X $20^{\prime}$ addition. Here is the map (Pointing to the map).

Commissioner T. Adamski asked: Now this is increasing the footprint but in the front?
1.W.E. Officer A. Ferrillo replied: Yes, in the front by the parking area. This can be referred back to me if you choose as there is no impact to wetlands.

MOTION made by Commissioner T. Adamski to refer BUI, Inc. 7 Fox Hollow Road addition back to the Enforcement Officer for approval. Seconded by Commissioner B. Richter. All in favor 5-0.

A discussion ensued over lowering the bond for the Cocchiola property.
Commissioner $\$$. Purcella Gibbons stated: I think that we let him know last time that we wanted to see more substantial plantings.
1.W.E. Officer A. Ferrillo added: There hasn't been a substantial amount of rain in the past few months.

Commissioner T. Adamski stated: I thought it looked better last year because of the lagumes. Now I think it looks worse.

MOTION made by Commissioner B. Richter and seconded by Commissioner T. Adamski to keep the bond in place until there are more substantial plantings. All in favor 40 .

## COMPLAINT/CONCERN:

## APPLICATIONS NOT REQUIRING OCCIWA APPROVAL:

|  |  | NON. |
| :--- | :--- | :--- |
| DATE | NAME | PERMIT |
| $10 / 7 / 2013$ | Paul Duh | REASON |
| Brett | RORESS | roof renovations -partial Basement |
| $10 / 15 / 2013$ | Reneedackson | 62 Chestnut Tree Hill Rd. |


|  | Ill |  |  |
| ---: | :--- | :--- | :--- |
| $12 / 18 / 2013$ | Margaret Thomas | 571 Inverness Ct. | Cofor rec room |
| $1 / 8 / 2014$ | Best Wise Assoc | 441 Oxford Rd. | Professional Office |
|  | Ceorge Transport, |  |  |
| $1 / 9 / 2014$ | LLC | 766 Oxford Rd. | Cottage Biz |
| $1 / 13 / 2014$ | Chris Kelly | 347 Niblick Lane | Finish bsmt |
| $1 / 16 / 2014$ | Enterprise BUl, LC | 7 FoxHollow | Mezzanine |

## MATTERS OF VIOLATIONS/LITIGATIONS:

1. Notice of Cease \& Restore - ( 88 Perkins Rd) Debris and garbage on property.
2. Notice of violation -( 543 Roosevelt Drive), wall constructed in a flood zone without a permit.
3. IW 13-93) Cocchiola Paving - Riverview Subdivision, (Permit denied, pending litigation) (return of record was completed and presented in court on April 2, 2014)

## REPORTS ON SEMINARS, INSPECTIONS, and OTHER MEETINGS SCHEDULED OR ATTENDED NEWSPAPER ITEMS \& P \& Z MINUTES:

## OTHER ITEMS OF CONCERN:

## COMMENTS FROM THE CHAIRMAN \& OTHER COMMISSION MEMBERS OTHER:

1) Oxford Oak, LLC 360 Oxford Road (Lot 39) (Stabilization of site).
2) Open Space Inventory Map. Completed by New England Geosystems
3) NOV WR SW 06007 (Issued 4/10/06) CT DEP Meadow Brook Estates, Great Hill Road (Remove Sediment from Pond \& Stream) (Letter dated 9/27/06) (Memo dated 8/4/06). Work completed, staff to monitor site for 1 year.
4) Town of Oxford Catch Basins (Silt Removal).
5) Stom Drain Marker Program (Phase II).

## MATTERS OF CONSERVATTON:

## ADJOURNMENT:

MOTION made by Commissioner E. Stewart to adjourn at 8:50 p.m. Seconded by Commissioner B. Richter. All in Favor 4-0.

