Belta Subdivision

Storm Water Infrastructure Long Term Maintenance Program

The long term maintenance of the storm water infrastructure is based on a Best Management Practices (BMP's) approach to manage both the on-site stormwater quality and quantity. The recommendations herein are proposed to assist in protecting the watersheds downstream as well as the associated on-site wetland and watercourse system.

The success of BMP controls requires professional and regulatory input, and monitoring through the implementations of a long-term maintenance program. The responsibility of the program rests with the **Property Owner or Home Owners Association (HOA)**, which is subject to the conditions of the wetlands permit granted for the project. The proposed program schedule recommended, at a minimum, **for the property owner or HOA** to comply with the permit, includes the following:

A. Catch Basins - all basin sumps to be cleaned out and hooded outlets to be inspected for structural integrity. These procedures should be conducted yearly anytime after May 1st and before September 15th.

B. Oil Water Separators - structures to be cleaned out and baffles to be inspected for structural integrity. These procedures should be conducted yearly anytime after May 1st and before September 15th.

C. Plunge Pool/Stilling Basins/Sediment Traps - these devices should be inspected bi-yearly in the spring and fall and should be excavated upon the inspecting engineer's recommendations or when the device is half full of sediment, whichever occurs first. Cleaning of sediment should be done anytime between July 1st and September 15th.

D. Infiltration Basins/Stone Edge Filter Strips – these devices shall be inspected annually to verify undermining or plugging of the system. A natural herbicide shall be used to minimize invasive vegetation by spot application. The 4" top layer of washed stone shall be replaced as needed when plugging occurs on Stone Filter Strips. Basins shall be mowed a minimum of one per year during the fall and the bottom of the basin kept free from woody growth.

E. Subsurface Infiltration Basins – these devices shall be inspected annually any time after May 1st and before September 15th to verify sediment depth and potential blockages exist. Plugging of stone soil interface is to be prevented for long term effectiveness of the system. Use a vac truck to remove any deleterious material.

F. Basin Vegetation and Rain Gardens – Upon completion of installed plant material keep plants watered for 14 consecutive days. Plants are preferable to be installed in spring or fall. Monthly visually inspect planted areas, preferably during a storm event, and repair erosion using small stones or with a bio degradable stabilizing blanket. These systems shall be inspected bi-yearly in the spring and fall for the first three years of operation to verify survival and functionality of the installed plant material. An

acceptable coverage and survival rate is 85% of the selected material. Prune and trim material if determined necessary by a landscape architect, biologist or horticultural specialist. Assess micro-topography, drainage paths and sediment trapping, and verify length of time for ponding to dissipate after a storm event. A 4-8 hour cycle is normal, accept in spring and during the winter, times can take longer. Vegetation having pest and disease problems need to be treated by a state certified contractor. Remove and replace all dead and diseased vegetation considered beyond treatment.

G. Detention/Water Quality Ponds/Wetland Bio Filtration Basins – these systems should be inspected bi-yearly in the spring and fall for the first three years of operation, to insure the functionality of the planted vegetation, the sediment forebay efficiency and the micro-topography, and removal of invasive plant material. Subsequent inspections shall be performed on a yearly basis observing the above-mentioned components, as well as the removal of trash, debris and invasive plant species, inspection of outlet control structures, level spreaders, bio-swales and all components associated with functional design components of the BMP.

H. Energy Dissapators - these devices should be inspected annually to verify undermining of the system and that downstream erosion is not occurring. If such occurs, the device should be repaired immediately.

I. Continuous Deflective Separation Units (CDS Units) –

1. CDS devices shall be inspected by the engineer and the manufacturer's technical representative after every runoff event during the first 30 days after installation. The inspection shall ascertain that the unit is functioning properly (no blockages or obstructions to inlet and/or separation screen), measuring the amount of solid materials that have accumulated in the sump, the amount of fine sediment accumulated behind the screen, and determining the amount of floating trash and debris in the separation chamber. This will be done with a calibrated "dip stick" so that the depth of deposition can be tracked.

2. During the rainfall season, (March 15 to May 15 and Oct. 15 to Dec. 15), the unit will be inspected at least once every 30 days. The floatable objects will be removed and the sump cleaned when the sump is 75-85% full. If floatable objects accumulate more rapidly than the settleable solids, the floatable objects shall be removed using a vacuum (vactor) truck or dip net before the layer thickness exceeds one to two feet. The unit will be cleaned out at the end of the rainfall season using a vactor truck. Disposal of material from the unit will be offsite at a Town approved facility.

3. The CDS unit will be pumped down at least once a year and a thorough inspection of the separation chamber (inlet/cylinder and separation screen) and oil baffle performed. The separation screen shall be power washed for the inspection.

This Long Term Maintenance program shall be implemented and monitored in accordance with the terms of the program schedule noted above. The **property owner or HOA** shall be

responsible for monitoring all items. The **property owner or HOA** shall conduct bi-annual inspections for its obligation under the program, performed by a licensed engineer and reports shall be copied to the Town I/W office. The Town shall have the right to intervene and enforce the plan at no cost to the Town.

F:\!-Dymar-Civil\Technical Support Info\TechAids Internal Tools\Stormwater\BMP Aids\HOA Long term Maintenance Program.doc