Private Drainage and Detention Pond Operation and Maintenance Requirements City of Tomball (Minimum Requirements)

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AS-BUILT REQUIREMENTS

1. Prior to facility occupancy, the Engineer of Record (EOR) will provide as-built drawings certifying the pond system design and the volume provided is in accordance to the approved plans. The Owner or their designated representative will be responsible for providing signage identifying the responsible contact and phone number for continued operation and maintenance of the pond in accordance to the approved plans.

SITE INPSECTIONS AND REPORTING REQUIREMENTS

1. The Owner or their designated representative will be responsible for inspecting the site to ensure that all systems are maintained and are in good working condition. The City will be notified and kept informed in writing of the site representative, including phone number and address. A standard reporting form will be developed by the Owner for City review and approval. Inspection reports will be provided to the City on a minimum of a quarterly basis.

ROUTINE INSPECTIONS

- 1. Routine inspections will dictate maintenance requirements for general items at the site including (if applicable to site), locks, fencing, signage, and road/access conditions.
- 2. Defective or missing locks will be replaced and will be keyed to match all other site locks.
- 3. Missing or damage chain link fence will be repaired or replaced as needed. Fencing repair or replacement will be accordance with specifications from the original design plans.
- 4. Damage or missing signs will be replaced with a similar type signs.
- 5. Roadway surfaces which are damage will be repaired in accordance to the original plan specifications.
- 6. Surface water ditches and detention ponds will be observed for erosion or sediment build-up, which could result in overtopping and severe erosion down-slope.

SPECIAL INPSECTIONS AFTER MAJOR HURRICANE OR TORNADO EVENTS

1. Special unscheduled inspections will be conducted as necessary at the site after major hurricane or tornado events. Every attempt will be made to have these inspections conducted within several days after the storm event to ensure fencing is still in place and major damage to the facilities has not occurred. Any repair will be conducted as soon as possible.

MONTHLY MAINTENANCE

1. The majority of the site was planted with a type of (define native grass seeding). Typically, these areas will require mowing twice a month from April through October, and monthly mowing from November through March.

ANNUAL MAINTENANCE

1. Annual maintenance of the site may include fertilizing and reseeding the site, as necessary.

SURFACE MAINTENANCE

- 1. Inspections performed, as part of the scheduled routine inspections at the site will dictate maintenance requirements for the site. The items to be routinely inspected include surface water runoff control, ponded water, presence of erosion or gullying, and whether or not the topsoil and vegetation are intact.
- 2. The site will be inspected to determine whether it drains without ponding and erosion.
- 3. Topsoil will be inspected for erosion, settlement, and cracking. Topsoil will be added as necessary to maintain drainage characteristics in accordance with the original specifications. Areas affected by the addition of topsoil will be seeded and fertilized in accordance with the original seeding specifications.
- 4. Topographic surveying of the detention pond and storm drainage system may need to be periodically performed to verify functionality of the system.

SURFACE WATER MANAGEMENT SYSTEM MAINTENANCE

- 1. Inspections performed, as part of the scheduled routine inspections at the site will dictate maintenance requirements for the surface water management system at the site. The items to be routinely inspected include inlets, culverts, drainage pipes, sediment controls, erosion of drainage ditches or berms, and the condition of the detention ponds.
- 2. Inlets culverts, and pipes will be visually inspected to ensure that no obstructions are hindering the performance of the

surface water drainage system.

- 3. Any significant obstructions found will be removed.
- 4. Inlets also will be visually inspected to ensure that grates are in place.
- 5. Any missing or damaged grates will be replaced.
- 6. Inlets, culverts, and pipes will be visually inspected for leaks or structural damage.
- 7. Any damaged items will be repaired or replaced in accordance to with the original specifications.
- 8. Areas are to be visually inspected for sediment build-up includes drainage pipes, drainage ditches and the area within the pond site.

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- 9. If sediment buildup occurs in the surface water piping system, the sediment will be cleaned from the pipes to maintain their original hydraulic capacity.
- 10. If sediment buildup is obstructing the normal flow pattern in the drainage ditches, the sediments will be removed.
- 11. Surface water ditches and detention pond side slopes will be visually inspected for erosion and gullying.
- 12. If erosion occurs in surface water ditches, topsoil will be added as necessary to maintain drainage characteristics in accordance to the original plans.
- 13. If erosion occurs on the detention pond side slopes, a fill material will be added as necessary to maintain the original grade of the slope.
- 14. The detention pond will be visually inspected for the presence of litter. Any litter will be removed on a continual basis.

EQUIPMENT REQUIREMENTS (when applicable)

1. The equipment maintenance requirements will be determined based upon the manufacturers recommendations and will be included on the design plans. At a minimum, lift stations will require duplex systems. The Engineer of Record will provide for City review equipment operation and maintenance requirements.