[Date]

[Contact]

City of Longmont

385 Kimbark Street

Longmont, CO 80501

**Re: [Development Name] Detention Facility & PSC Certification Letter**

City of Longmont Staff:

The intent of this letter is to formally certify that the [fully-infiltrating/partially-infiltrating/non-infiltrating] sand filter installed at [development name] was designed to meet all detention and water quality technical standards outlined in Title 14.24 and 14.26 of the City of Longmont (City) Municipal Code, and was inspected and confirmed to be constructed in general conformance with the City-approved construction documents and specifications.

[Summarize any deviations from approved construction plans and specifications, if any. Identify why these changes do not impact the claim above.]

The as-constructed [10-year/EURV] and 100-year flood detention volumes are within #.#% of the design volumes, and the release rates have been verified to not exceed the designed requirements. A freeboard of #.## ft was also confirmed to be provided by the constructed facility.

The filter material installed matches the design specifications and was installed to the appropriate depth. The filter material was determined to have been adequately protected from excessive sediment loading during construction and/or is fully functioning at the time of certification, and [all areas tributary to the sand filter have now been stabilized/it has been communicated to the contractor that the filter material must continue to be protected until the entire tributary area is stabilized]*.*

[only provide if appropriate] Construction of the impermeable liner was overseen to verify the specified material type was used, all seams were joined correctly, and enough slack was provided in the liner for backfill, compaction, and settling without tearing.

The #-inch PVC underdrain was verified to have been installed within a #-inch section of CDOT Class C filter material, located at least 18-inches below the filter layer, and with the correct specified slotted dimensions. All cleanouts were constructed with solid pipe and do not allow water to bypass the filter material.

Key metrics used in the approved design have been updated for the as-built condition, and are identified in the table below:

|  |  |  |  |
| --- | --- | --- | --- |
| **Metric** | **Design** | **As-built** | **Units** |
| 100-Yr Storage Volume |  |  | Ac-ft |
| 100-Yr WSE^ |  |  | Ft |
| 100-Yr Release Rate |  |  | cfs |
| 10-Yr/EURV Storage Volume |  |  | Ac-ft |
| 10-Yr/EURV WSE^ |  |  | Ft |
| 10-Yr Release Rate/EURV Drain Time |  |  | cfs or Hours |
| WQCV |  |  | Ac-ft |
| WQCV WSE^ |  |  | Ft |
| WQCV Depth\* |  |  | Inches |
| Media Surface Area |  |  | Square feet |
| Underdrain Orifice Diameter |  |  | Inches |
| WQCV Drain Time |  |  | Hours |
| ^ WSE: Water surface elevation  \* Depth from the top of the filter material to the lowest opening of the overflow structure | | | |

Attached to this letter you will find:

* Original design construction documents including all relevant details and calculations for the detention and water quality facility
* As-built construction documents for the detention and water quality facility (includes a topographic survey of the constructed facility including the as-built elevations of pipe inverts, outlet structure elevations, and overflow spillway).
* Material specification sheet from the supplier for the filter media
* Updated calculations for the facility including a stage storage curve for the as-built facility as well as the outlet structure design indicating appropriate release rates and drain down time were met.
* Updated Operations and Maintenance Manual associated with the PSC. The Manual should be adjusted based on any changes that were made during construction and should contain the stamped as-built details for the PSC.
* Photograph Documentation of Sand Filter (only include what is applicable)
  + Impermeable liner (prior to any fill material)
  + Underdrain system including riser pipe for cleanouts
  + Connection of underdrain to outlet structure
* Provide the Stormwater Detention & Infiltration (SDI) worksheet necessary to submit to the Compliance Portal. After the SDI sheet and the PSC is structurally approved you will need to submit to the compliance portal.
  + [SDI Worksheet](https://longmontcolorado.sharepoint.com/sites/Projects-SWQProgram/Shared%20Documents/General/Permitting/PSC%20Program/PSC%20Certification%20Templates/mhfd.org/wp-content/uploads/2020/04/SDI_Design_Data_v2.00.xlsm)
  + [Compliance Portal](https://maperture.digitaldataservices.com/gvh/?viewer=cswdif)

Sincerely,

First Last Name, P.E.

Title

Organization Name

NOTE: THIS LETTER MUST BE STAMPED AND SIGNED BY A COLORADO LICENSED PROFESSIONAL ENGINEER