



## MECHANICAL SYSTEMS ENGINEERS

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March 13, 2015

David Lloyd  
Architect  
Archetype, P.A.  
48 Union Wharf  
Portland, ME 04101

Re: 118 on Munjoy Hill – Requirement of an oil/water & grit separator

Dear David,

We have reviewed the conditions of the interior parking garage floor drains, and disagree with the necessity of an oil and grit interceptor for these floor drains that flow to the sewer system.

As we understand it, the preliminary design presented to the planning board had these parking drains as part of the overall Stormwater plan. If this had been an outside parking lot, or open walled covered parking area, that would have been correct, but this parking space is entirely enclosed and never receives any rain or run-off. Instead of the 13,000 gallons per hour run-off possible in the 100 year storm from a typical exterior parking lot, here less than 1 gallon per day is expected from any dripping vehicles. In fact most of water drips on these vehicles are expected to evaporate.

Regardless of what was proposed to the planning board, once an area is totally enclosed by the building it falls under the jurisdiction of the Maine State Plumbing Code, rather than any site stormwater plan. According to the Plumbing Code an indoor parking does not require an oil or grit interceptor, except in cases where the vehicles are expected to be washed or serviced. No vehicles will be allowed to be wash or serviced inside. Any concern that the vehicles of these well-to-do residents might drip oil cannot be a serious one. However, if the issue is pushed, the amount of oil is well below the 100 milligrams per liter level of hydrocarbon oils listed in Portland's Chapter 24, Section 24-17. Also according to Section 24-48, if the public works authority does require pretreatment, then the design and installation shall be subject to its review and approval subject to the provisions of the state plumbing code, and the Plumbing code does not require it.

As for preventing the sand/grit from washing into the sewer system, please note that unlike an exterior parking lot that is heavily sanded after every snowstorm, the tiny amount of sand here is only that which will be carried into the garage on tires and undercarriages. Also since there is no rain inside the building, there is not sufficient flow to move the sand to the drain. The owner will hire a sweeper annually to clean the sand off the floor. Any sand that does land directly on the floor drain grid itself will be caught by the large sediment bucket inside the floor drain.

I recommend that this be appealed to City Manager (within the 10 days of the date of the written notice of violation) according to Section 24-57.

Please call with any questions or comments.

Very Truly Yours,

Eric J. Pflugradt  
Mechanical Systems Engineers