Subject: DES: Concrete

## FY 2023 Proposed Budget Budget Work Session Follow-up

## 3/24/2022

The following information is provided in response to a request made by Ms. Garvey at the work session on 03/03/2022, regarding the following question:

Can the concrete study include concrete that absorbs CO2?

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The Department of Environmental Services (DES) is not aware of any concrete that absorbs CO2 once it is placed; however, several companies have developed approaches that "capture" CO2 via mineralization as part of the construction process, either by sequestering CO2 as part of the manufacture of items like concrete blocks or injecting recycled CO2 into concrete mixes for more traditional on-site cast-in-place applications.

The County is employing the use of low carbon concrete as part of the new ART Operations and Maintenance Facility (AOMF) project in Shirlington. The use of more advanced low carbon concrete with injected CO2 is also being reviewed to possibly pilot, for the first time, in the AOMF project for specific elements. At the same time, DES is continuing to review the market for products that are commercially available and that meet County specifications and performance requirements. The concrete study has been completed and focused on a survey that gathered data on the current condition of County sidewalks. Recommendations on implementation of the concrete sidewalk study will be discussed as part of the upcoming CIP process.