The road area outside 203 Cotter St., a suburban property in south central San Francisco, CA, has experienced frequent flooding in recent years. A preliminary investigation of the site by the San Francisco Public Utilities Commission [PJ K2] (SFPUC), the public utility for the City of San Francisco responsible for mitigation of flooding, attributed the flooding to low elevation and poor grading of the surface. Five technical [IT3] options were developed: Do Nothing, Green Roofs, Bio-Retention Planter, Easement Pipe, and Detention Tank. Each option was assessed and compared against five criteria [IT4]: Drainage Performance, Low Financial Cost, Ease of Operation and Maintenance, Minimal Environmental Impact, and Reliability. Each option was represented in an EPA SWMM hydraulic model[PJ K5] for assessment of Drainage Performance. One option, an on-site detention tank, was selected as the primary recommended solution to be implemented by SFPUC. An implementation plan was prepared which included considerations toward location, construction, environmental impacts, costing, and scheduling[IT6]. Two additional options, green roofs and bio-retention planters, were selected as secondary recommended solutions to be optionally implemented by the Golden Bridges School that is currently being built on the property itself.

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