



Santo Domingo Creek Floodplain Restoration at Rock Lititz

Stream and Floodplain Restoration

Challenge

Rock Lititz Properties, comprised of Clair Global, and Tait Towers proposed to construct a new campus facility on a 96-acre farm that had been rezoned to industrial land. The Santo Domingo Creek, a tributary to Lititz Run located within the property, had been significantly altered by historical human activities. The channel had been realigned by farming operations and legacy sediment had deposited in the flat valley bottom following extensive land clearing in the upslope watershed. Streambank erosion and stream bed degradation had resulted in nutrient-rich sediment affecting downstream water quality. Project goals included restoring the degraded riparian corridor while reducing pollutant loads, enhancing infiltration and maximizing buildable area.

Solution

LandStudies, Inc. designed a 17-acre floodplain restoration project that addresses the many needs of the campus. The floodplain restoration project will restore ~3,136 linear feet of the Santo Domingo Creek by removing legacy sediment from the valley bottom and increasing floodwater storage potential. This increase of flood storage, and the resulting peak rate reduction will eliminate the need for traditional stormwater basins and increase the amount of usable space for development. If traditional stormwater facilities were used, at least 2 of the proposed 10 parcels would have been significantly compromised and all would have had less buildable area. Diverse native vegetation and walking trails will become an aesthetic asset to the employees of the Rock Lititz campus as well as the local community. In addition, the project will reduce stream bank erosion and promote the infiltration and filtration of runoff resulting in water quality benefits.

Services

Landscape Design | Engineering | Geomorphic Assessment | Permitting



Existing Conditions



Floodplain Restoration – Post Construction

Client: Rock Lititz Properties
Location: Warwick Township



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