

ALTERNATIVE 2A: GREEN BROOK CHANNEL MODIFICATION AND NEW PROVIDENCE GORGE DAM WITH A DETENTION BASIN



- ♦ Channel clearing along the Green Brook to increase the storage capacity of the stream in critical sections between Highway 22 and the Green Brook Park.
- ♦ The total length of channel modification is 12,400 feet along the Green Brook. The channel typical cross-sections are designed for more frequent flood events up to the 4% annual exceedance probability storm event (25-year storm).
- ♦ One bridge may need to be replaced to address flow constrictions in Downtown Plainfield.

- ◆ The concept for the New Providence Gorge Dam consists of a 200-foot wide and 60-foot high cast concrete dam along the current location of New Providence Road and a 581-acre feet dry detention basin upstream of the dam location.
- ◆ The dam design would include a rock ramp to facilitate fish passage.
- ◆ The dry detention basin would retain water during peak flows and slowly release it through the dam outflow within a few days of the storm event.
- ◆ The concept would require relocation of New Providence Road along the Weldon Quarry property as an elevated road and mitigation of flood impacts to upstream structures located in the detention basin.
- ◆ The detention basin would manage flood risk up to the 1% annual exceedance probability storm event (100-year storm).

The Upper Basin Study is conducting initial public engagement under NEPA to inform the evaluation of alternative plans for flood risk management in the Green Brook Upper Basin. Public feedback is being requested via the website or via e mail at greenbrookfrmproject@usace.army.mil



U.S. Army Corps of Engineers