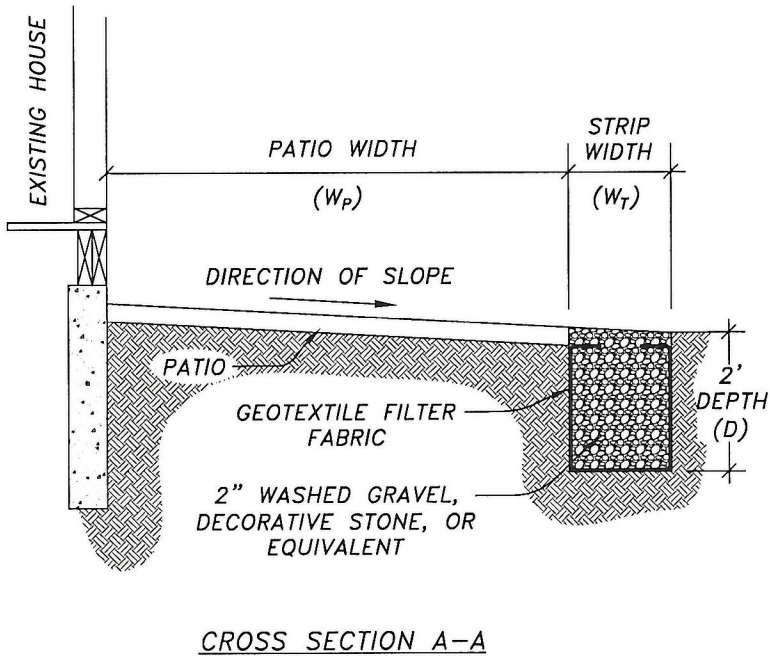
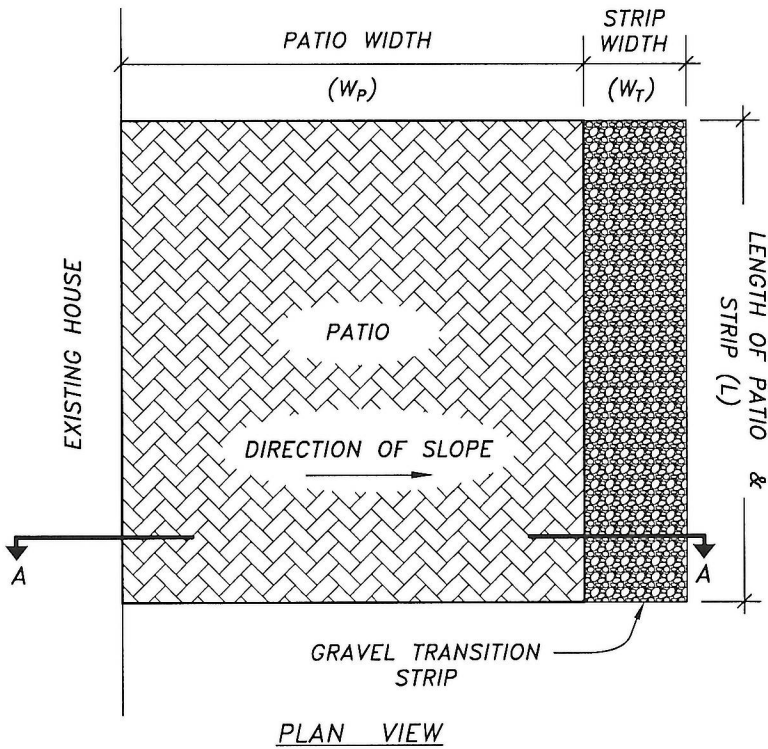


OPTION 1:

GRAVEL TRANSITION STRIP DIAPHRAGM DESIGN



SITE DETAILS

- a. LENGTH (L) _____ (FT)
- b. WIDTH (W_p) _____ (FT)
- c. AREA OF PATIO (A)

$$A = L \times W_p = \text{_____ (FT}^2\text{)}$$

- d. RAINFALL VOLUME TO BE TREATED

$$* P_E = 0.083 \text{ FT}$$

$$ESD_V = P_E \times A = \text{_____ (FT}^3\text{)}$$

WIDTH OF GRAVEL TRANSITION STRIP

- e. STANDARD DEPTH (D) = 2 (FT)
- f. REQUIRED LENGTH (L or W_p) _____ (FT)
- g. REQUIRED WIDTH (W_t)

$$W_t = ESD_V / (0.40 \times D \times (L \text{ or } W_p)) = \text{_____ (FT)}$$

EXAMPLE

- a. L = 20 FT
- b. W_p = 10 FT
- c. A = (20 X 10) = 200 FT²
- d. ESD_V = (0.083 x 200) = 16.6 FT³
- e. D = 2 FT (STANDARD)
- f. L or W = 20 FT **
- g. W_t = 16.6 / (0.40 x 2 x 20) = 1 FT ***

NOTES / CONDITIONS:

1. * P_E = 0.083 FT, IS EQUIVALENT TO 1 INCH OF RAINFALL.
2. ** LOCATION AND LENGTH OF GRAVEL TRANSITION STRIP IS BASED ON THE DIRECTION OF THE PATIO SLOPE.
3. *** ROUNDUP COMPUTED WIDTH TO THE NEAREST ¼ FT (I.E. 3 INCHES).
4. DO NOT ALTER OR INTERFERE WITH GRAVEL TRANSITION STRIP.
5. MINIMUM SLOPE ON PATIO AND GRAVEL TRANSITION STRIP SHALL BE 2%.

NOT TO SCALE

CHARLES COUNTY GOVERNMENT

DEPARTMENT OF PLANNING & GROWTH MANAGEMENT

APPROVED:

[Signature] 11/15/2022
CHIEF OF INFRASTRUCTURE MANAGEMENT DATE

[Signature]
STORMWATER ENGINEER

11/14/2022
DATE

STANDARD DETAIL

PATIO
(OPTION 1)

STORMWATER
MANAGEMENT
DESIGN

REVISIONS:

SWM
2.01