6- How to install a concrete stair within the keystone system?

Keystone walls can easily be constructed to incorporate CIP concrete stairs within the wall systems. The stairways can be designed to be incorporated into reinforced soil of the wall (see Figure V:3), or project out from the wall face (see Figure Y:3). Construct the Keystone wall as per design. Where a stairway is proposed, create a 90° outside corner with Keystone straight face and corner units. Construct the CIP concrete stairs as the project plans, making sure the include a ½ inch expansion joint between the stairs and the Keystone units.

NOTE:
International Building Code (IBC) indicates that stair facilities shall have a minimum riser height of 4 inches and a maximum height of 7 ¼ inches. Keystone Compac and Standard units are 8 inches high, therefore will not meet IBC code for stair riser use.

FIGURE V:3 - INSET STAIRWAY DETAILS

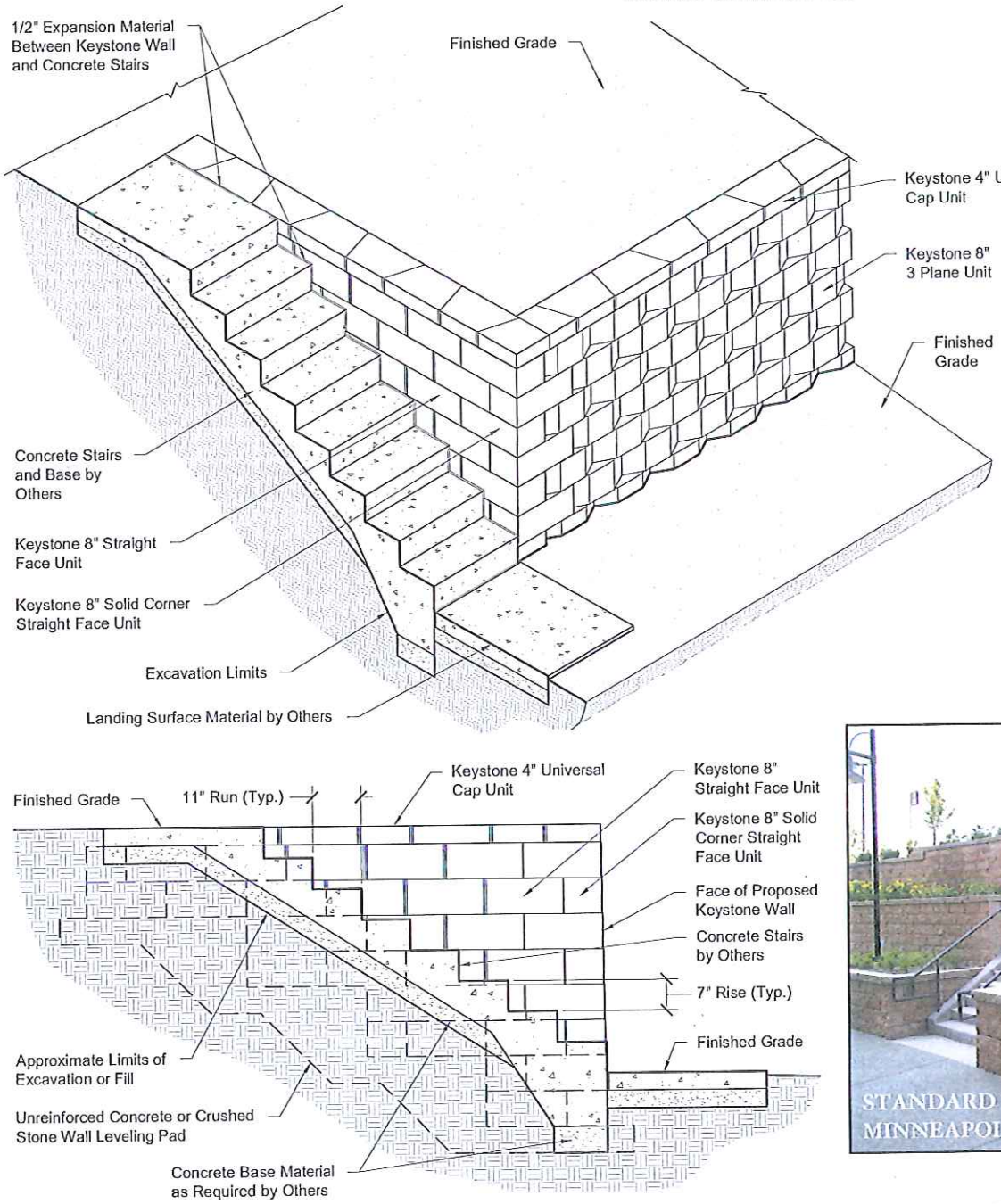


FIGURE W:3 - STAIR IN WALL DETAIL PLAN VIEWS

NOTE

Use Compac straight face units in return walls along concrete stair for ease of stair installation and for placement of bond breaker material between stair and wall.

Tread depths and riser heights may vary depending on design and or local codes.

Install hand railing as per local codes.

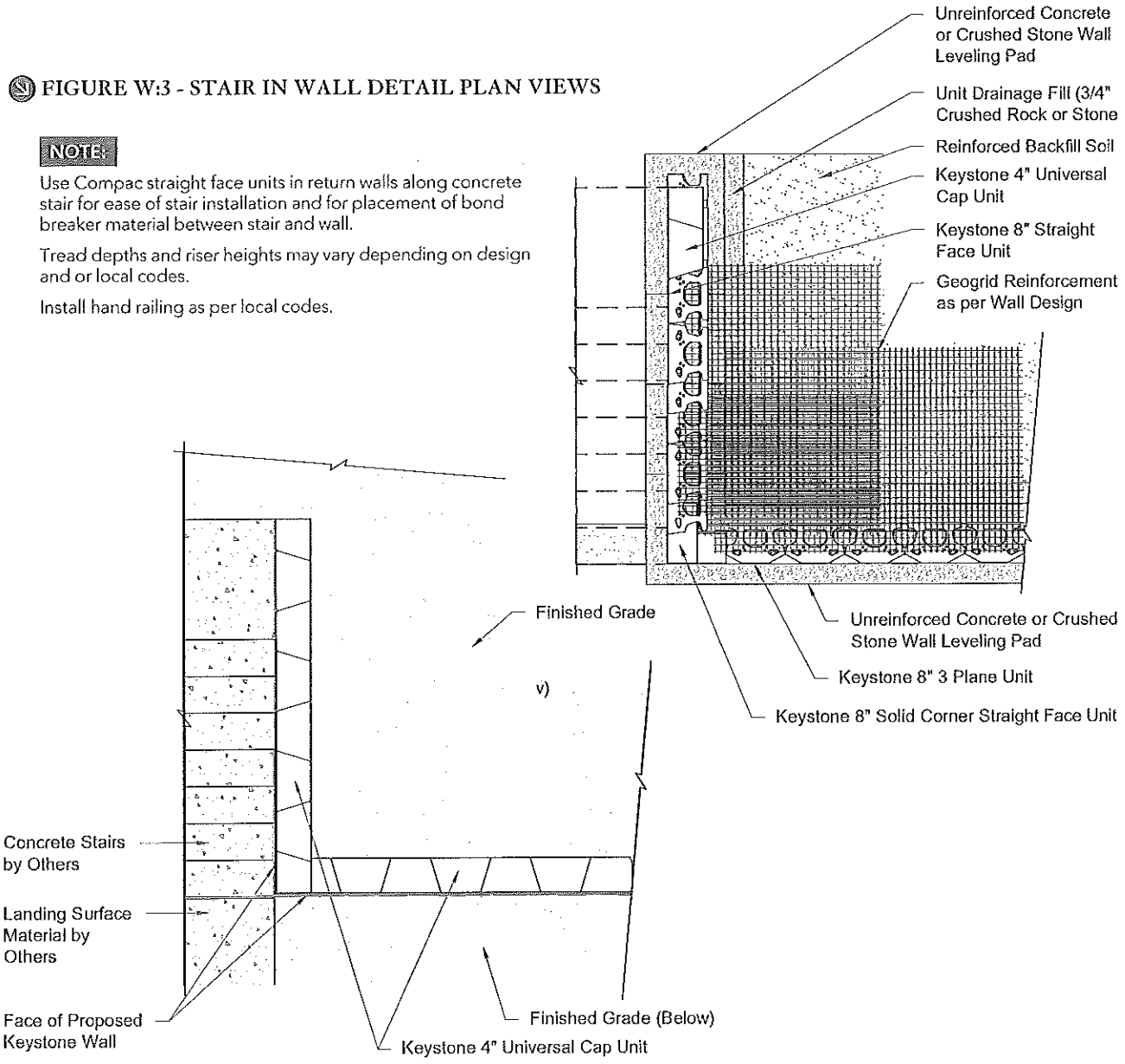


FIGURE X:3 - STAIR IN WALL DETAIL ELEVATION

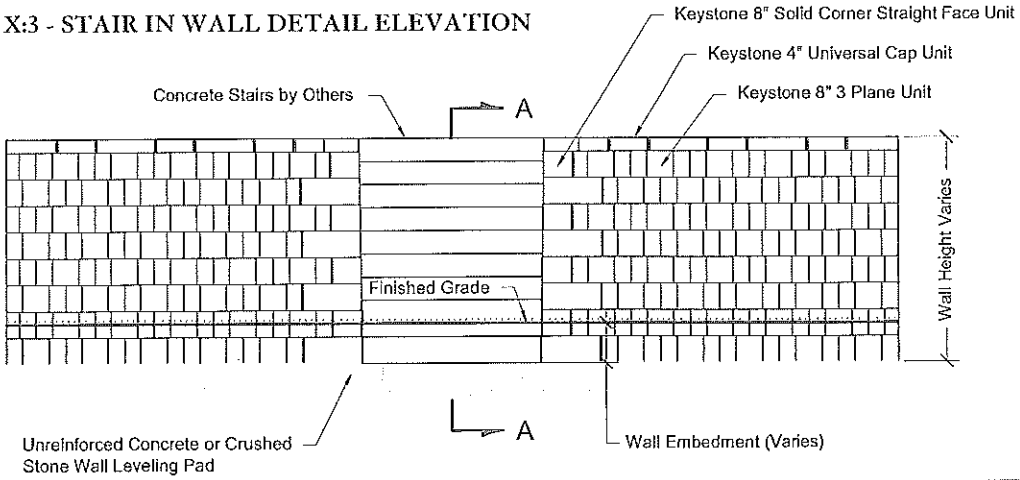


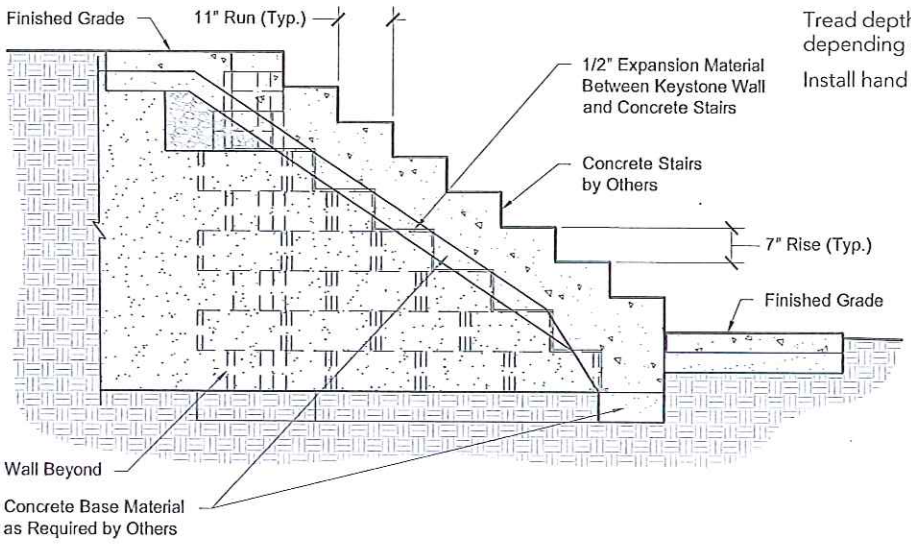
FIGURE Y:3 - PROJECTED STAIRWAY DETAIL

NOTE:

Place bond breaker material between Keystone units and concrete stair. Stair designs may vary.

Tread depths and riser heights may vary depending on design and or local codes.

Install hand railing as per local codes.



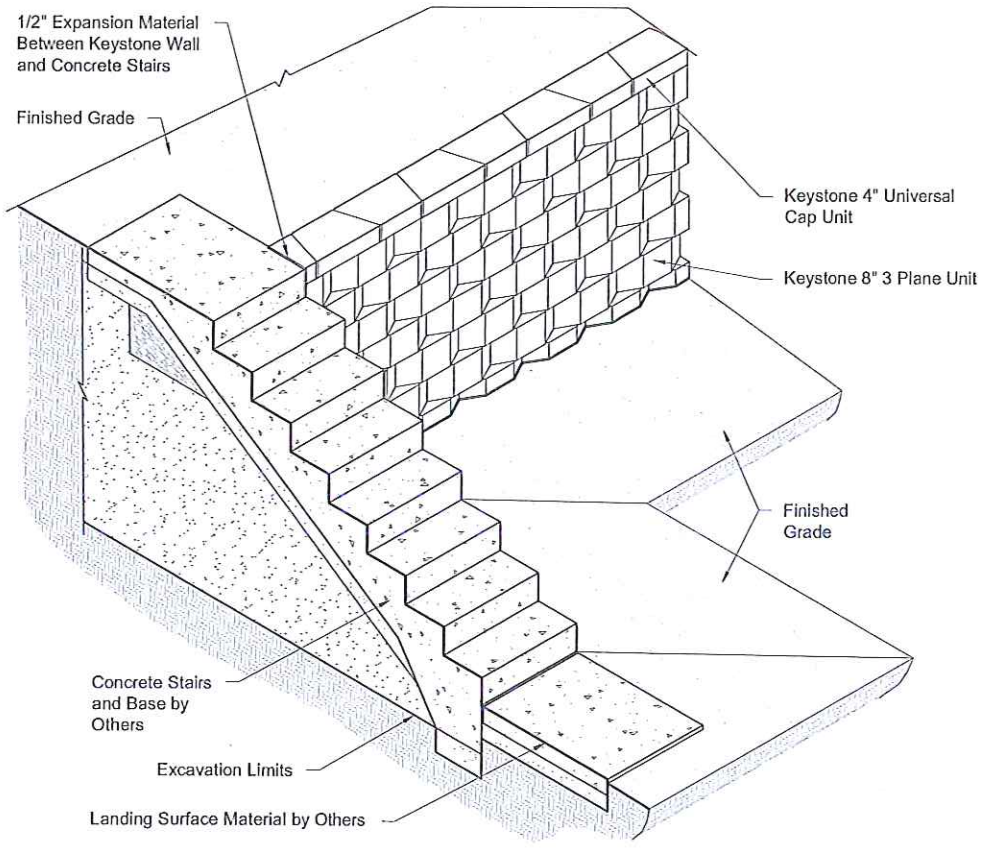
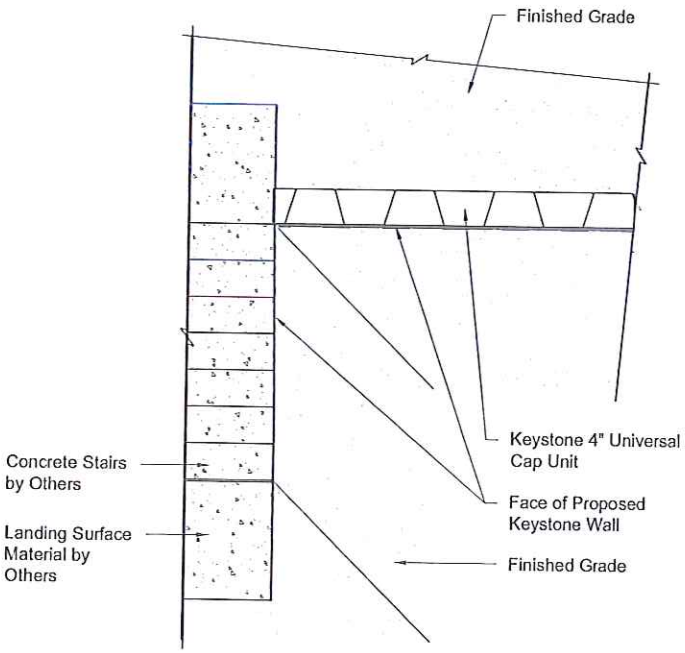
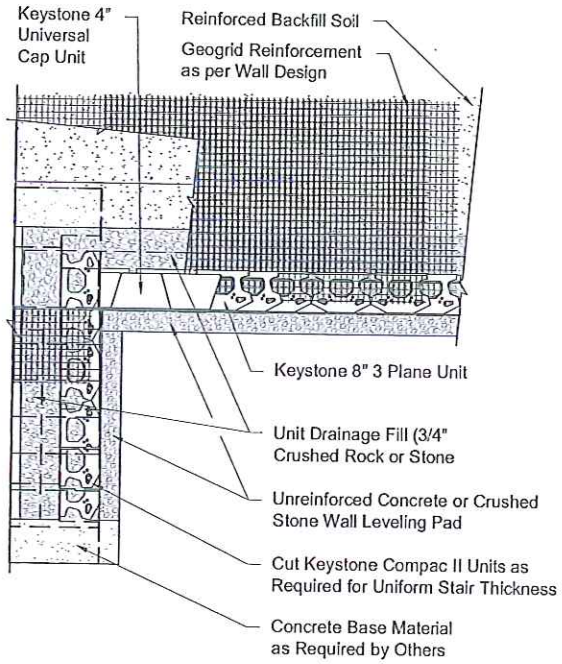


FIGURE Z:3 - STAIR IN FRONT OF WALL DETAIL PLAN VIEWS



Typical Stair Section Plan View - Final
Near Vertical Setback Shown



Typical Stair Section Plan View - Partial
Near Vertical Setback Shown

FIGURE A:4 - STAIR IN FRONT OF WALL DETAIL ELEVATION