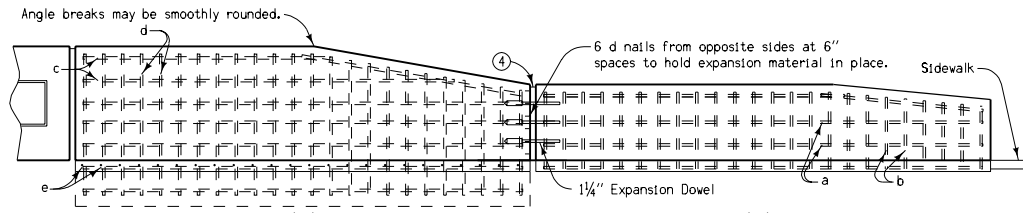


Construct rustic groove at approx. 2'-0" interval on horizontal plane. Stop grooves and connect approx. 1'-0" from joints or end of wall. Other details may be approved by the Engineer. Rustication not required for walls less than 3'-0" high.

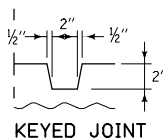
**RUSTICATION AND CONTRACTION JOINTS**



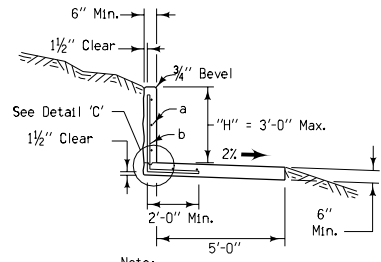
**TYPE 'B' WALL** **TYPE 'A' WALL**  
**TYPICAL LONGITUDINAL SECTION OF RETAINING WALL**

(Contraction joints required at 20'-0" spacing.)

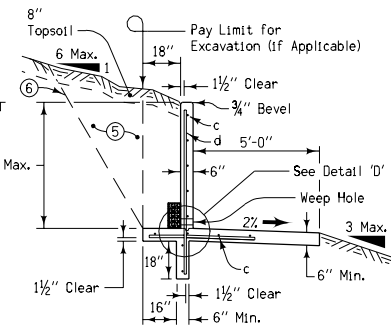
DESIGN QUANTITY TABLE (2)						
WALL TYPE	TYPE 'A' WALL			TYPE 'B' WALL (3)		
Height-ft	1'-0"	2'-0"	3'-0"	1'-0"	2'-0"	3'-0"
Concrete-yds <sup>3</sup>	2,407	2,777	3,148	3,518	3,888	4,259
				4,629	5,000	



**KEYED JOINT**

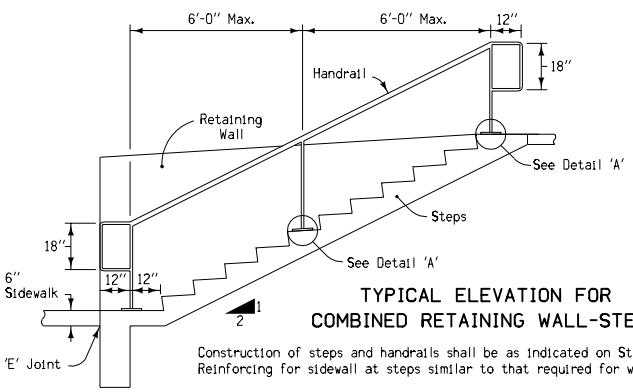
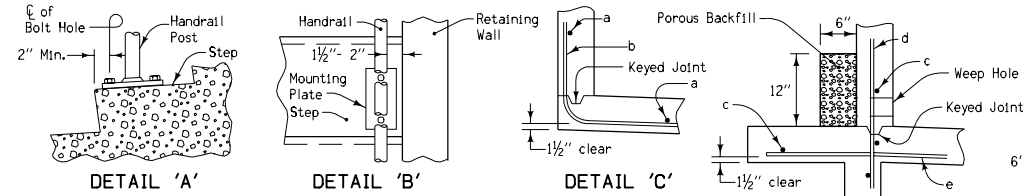


**TYPE 'A' WALL DETAILS**



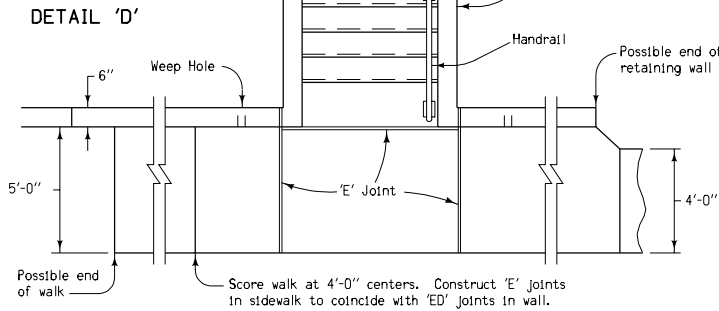
**TYPE 'B' WALL DETAILS**

Bottom and sides of footing and rear lug are not to be formed



**TYPICAL ELEVATION FOR COMBINED RETAINING WALL-STEPS**

Construction of steps and handrails shall be as indicated on Standard Road Plan RB-1. Reinforcing for sidewalk at steps similar to that required for wall shown hereon.



**TYPICAL PLAN FOR COMBINED RETAINING WALL-SIDEWALK AND COMBINED RETAINING WALL-STEPS**

**GENERAL NOTES:**

This plan shows the details for the construction of combination Retaining Wall Sidewalk and Steps. Refer to project plans for specific construction requirements for individual locations. Concrete shall be the same as required for walks.

The work of finishing and dressing up the disturbed areas adjacent to retaining walls is considered incidental to other work.

Unless specifically required on project plans, the Type 'A' wall does not require the back of the wall to be formed, installation of weep holes, or the placing of porous backfill. Where forming the back of the wall is not done and sloughing occurs, the loose material will be removed and replaced with concrete at no additional expense to the Contracting Authority. The Engineer may require the back of the wall to be formed if deemed necessary. Refer to detail project plans for methods of determining excavation requirements for individual locations.

For walls more than 3'-0" high, weep holes approximately 3 inches in diameter at 8 feet intervals are required (or as otherwise indicated on project plans). Weep holes are to be formed with an approved rustproof device backed with copper screening or galvanized hardware cloth.

All reinforcing steel to be epoxy coated. Unless indicated otherwise, all necessary excavation, porous backfill and reinforcing steel, as well as all other work and material necessary for the construction described hereon, shall be included in the price bid for "Combined PCC Sidewalk and Retaining Wall" or "Combined PCC Steps and Retaining Wall" as appropriate. Quantities for the portion of sidewalk or steps constructed as part of retaining wall are included in the corresponding bid item above.

- Top bar 6" parallel to top of wall. Lap 6" minimum, as necessary. Tie securely.
- Quantities are for 20'-0" of wall length.
- When specified, 0.37 cu. yds. of porous backfill are required per 20'-0" of wall length.
- 'ED' joint in wall with coinciding 'E' joint in sidewalk at approximately 40 feet spacing (60 feet maximum). See Standard Road Plan RH-52. Combine with angle break when feasible.
- Excavate and backfill as necessary.
- Contractor may excavate to optional excavation line where practical. Contractor may backfill with suitable soil or granular material. Backfill shall be placed and compacted as directed by the Engineer.

REINFORCING SCHEDULE					
WALL TYPE	MARK	SIZE	LENGTH	SPACING	NO. REQ.
Type 'A'	a	#4	Variable	12" Min., 15" Max.	Variable (1)
	b	#4	Variable	14"	17 (2)
	c	#4	Variable	12" Min., 15" Max.	Variable (2)
Type 'B'	d	#4	"H" + 18	14"	17
	e	#4	3'-10"	14"	17 (2)

**Iowa Department of Transportation**  
**Highway Division**

**STANDARD ROAD PLAN RB-2**

REVISION: Added detail for keyed joint. REVISION NO. 8

APPROVED BY: *William J. Altan*  
 DESIGN METHODS ENGINEER REVISION DATE 04-30-02

**COMBINED RETAINING WALL SIDEWALK**