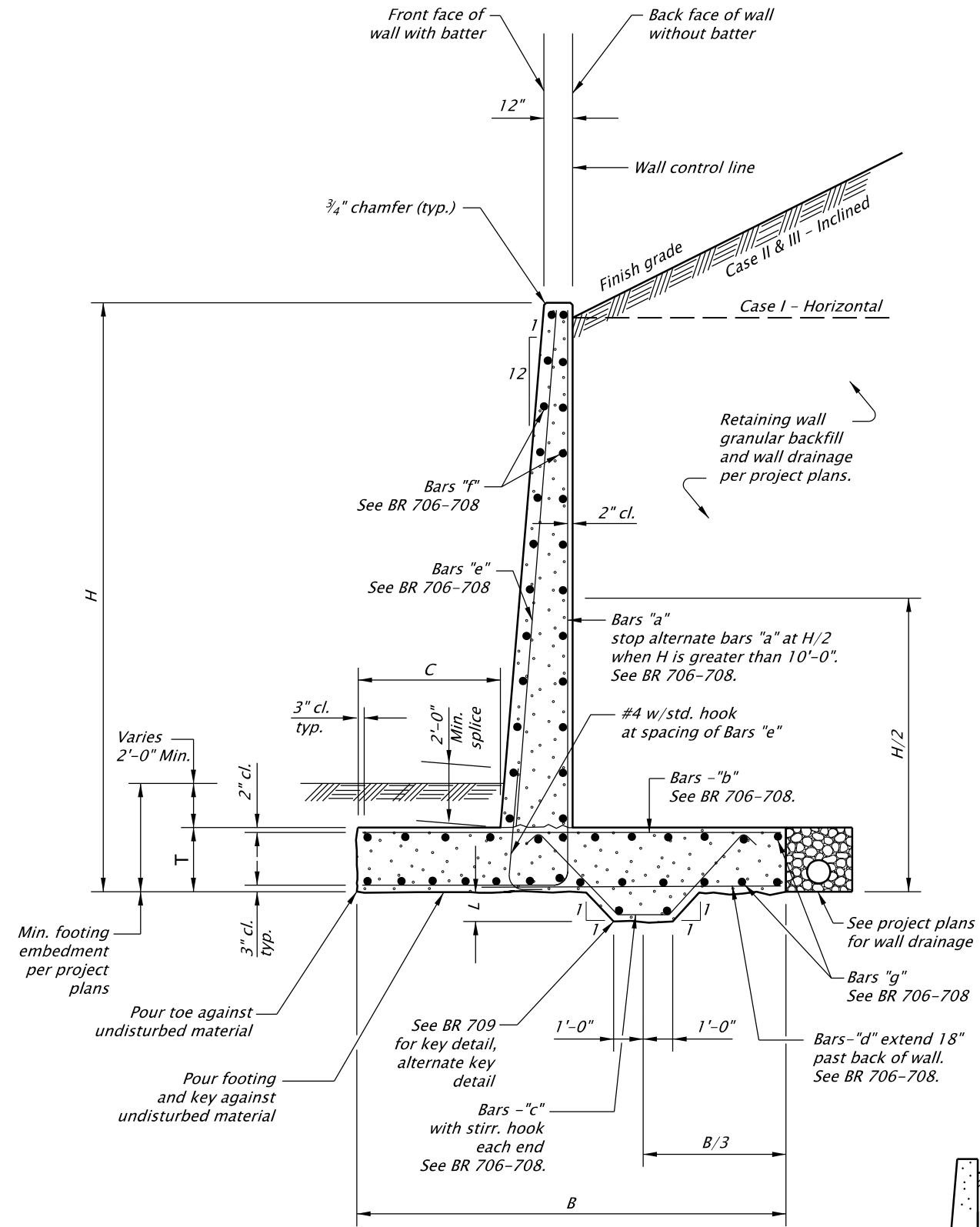
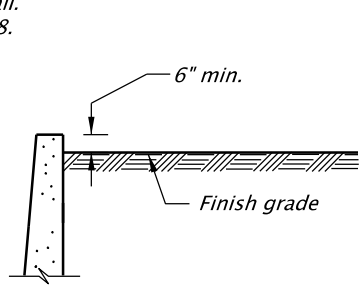
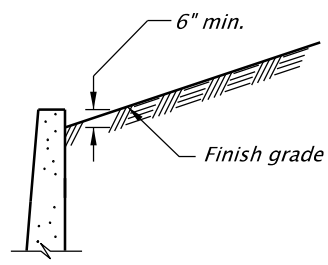




CROSS - SECTION
NONE



CASE I: Horizontal Backfill with
250 PSF Surcharge. See BR 706.



Inclined Backfill
CASE II: 3H:1V. See BR 707.
CASE III: 2H:1V. See BR 708.

GENERAL NOTES:

1. Cast-in-Place Semi-Gravity Standard Retaining Wall is designed in accordance with the AASHTO LRFD Bridge Design Specifications – seventh edition (including 2016 interim revisions) and the ODOT Geotechnical Design Manual (GDM), 2016.
2. Cast-in-Place Semi-Gravity Standard Retaining Wall design is based on the following soil properties:

Backfill & Retained Soil:	Soil angle of internal friction = 34°	Foundation Soil:	Soil angle of internal friction = 30°
	Soil Cohesion = 0 psf		Soil cohesion = 0 psf
	Soil weight = 125 pcf		
3. The internal stability and external stability design for overturning and sliding stability is addressed in the standard design. Overall stability, bearing resistance and settlement are addressed in site specific design.
4. Cast-in-Place Semi-Gravity Standard Retaining Wall is not designed for traffic barrier vehicular collision load or hydrostatic or seepage forces.
5. See Project Plans for drainage details.
6. Provide Class 4000 structural concrete.
7. Provide reinforcing steel according to ASTM Specification A706, or AASHTO M31 (ASTM A615) Grade 60. Use the following splice lengths unless shown otherwise:

Reinforcing Splice Lengths (Class B) Grade 60 Fc = 4.0 ksi									
Bar Size	#3	#4	#5	#6	#7	#8	#9	#10	#11
Uncoated	1'-0"	1'-4"	1'-8"	2'-0"	2'-6"	3'-3"	4'-1"	5'-2"	6'-4"

- Increase all splice lengths 30% for horizontal or nearly horizontal bars so placed that more than 12" of fresh concrete is cast below the bar.
- Splice reinforcing steel at alternate bars, staggered at least one splice length or as far as possible, unless shown otherwise.
8. Place bars 2" clear of the nearest face of concrete unless shown otherwise.
 9. If not shown, place expansion joints through wall stem at intervals not to exceed 90'-0" and contraction joints through wall stem at joint intervals not to exceed 30'-0". Transverse construction joints in footing are acceptable providing clean and roughened surface and continuous reinforcement through the joint.
 10. Perform shear key excavation with care to provide key dimensions indicated. Remove loose material and pour concrete against undisturbed foundation soil in the footing and key excavation.
 11. Do not backfill wall until all trenching that may be necessary in front of wall is backfilled and compacted, and compacted toe fill is in place to top of subgrade.
 12. For intermediate wall heights that are between the wall height values given in the wall data tables, use the tabular data for the next higher wall height. For intermediate values of seismic lateral wall coefficient, kh, use tabular data for the next higher kh.
 13. See Project Plans for required footing embedment.
 14. See Project Plans for architectural treatment, if required. Increase concrete cover on reinforcement as required to provide architectural treatment.

Accompanied by drawings – BR706, BR707, BR708 and BR709

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.			
OREGON STANDARD DRAWINGS			
STANDARD RETAINING WALL CAST-IN-PLACE SEMI-GRAVITY FRONT FACE BATTER			
2024			
DATE	REVISION DESCRIPTION		
01-2024	Revised notes 7,9		
CALC. BOOK NO.	N/A	SDR DATE	19-JAN-2024
			BR705