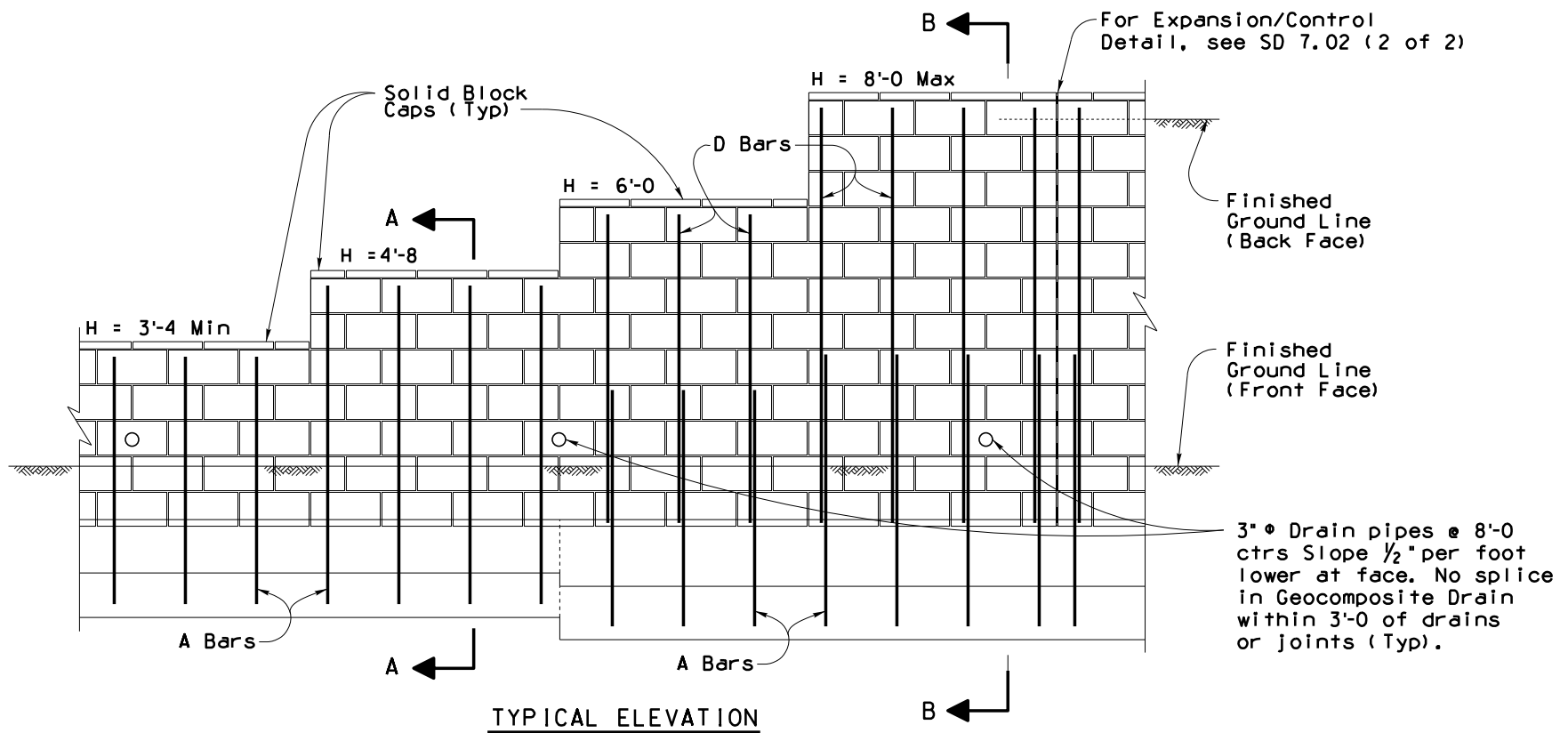


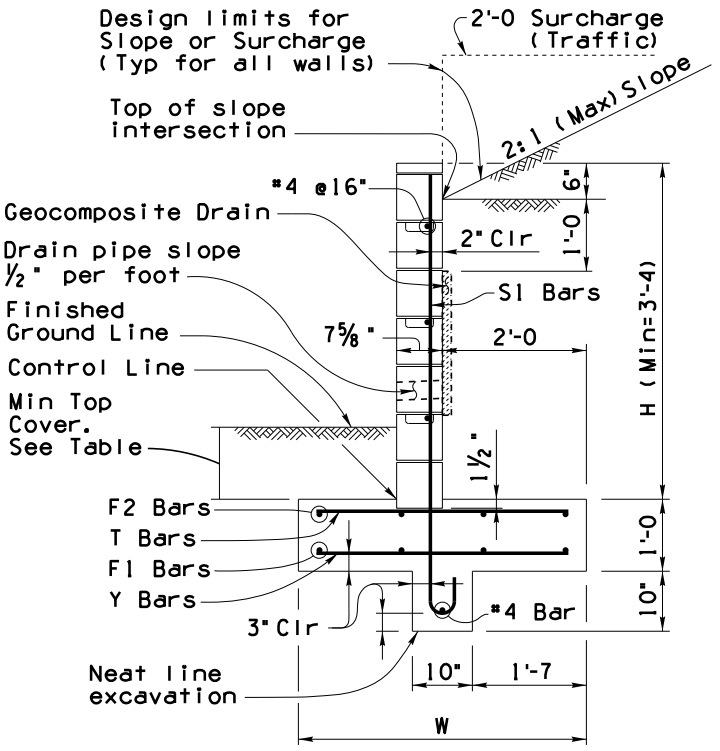
Note to Designer: The information presented in this Standard Drawing has been prepared in accordance with recognized engineering principles and is for general use. It should not be used for specific application without competent professional examination and verification of its suitability and applicability by a licensed professional engineer. Contents within the inner border line shall not be altered.

PRIOR DISTRIBUTION DATE 01/15



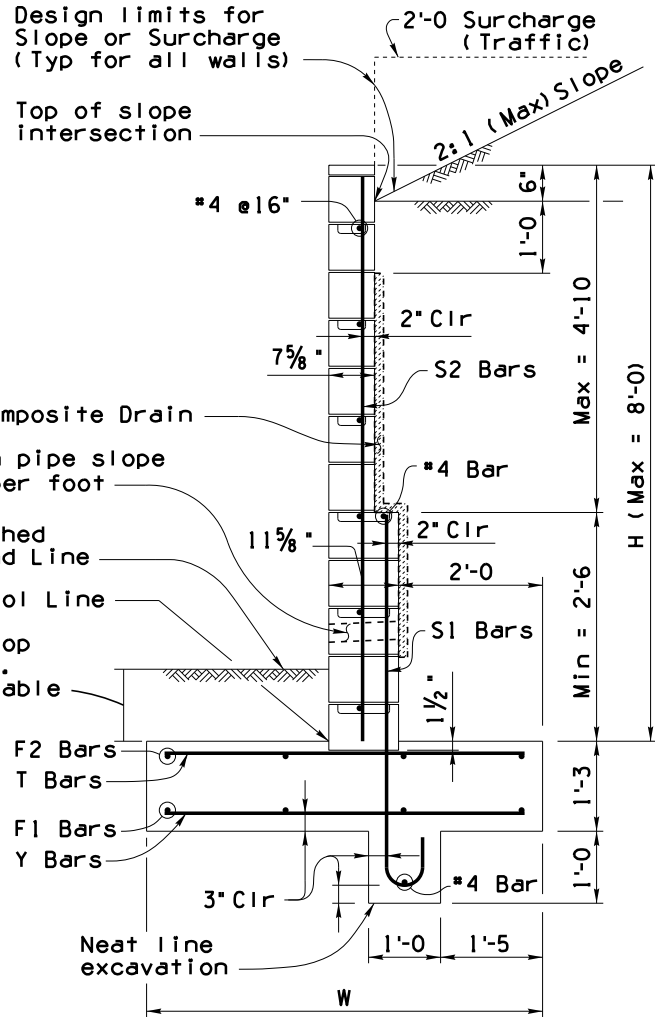
TYPICAL ELEVATION

NOTES:
 For Structural Excavation and Structure Backfill Limits, See SD 7.02 (2 of 2).
 For reinforcing bar sizes and spacing, See Wall Schedule.



SECTION A-A
(Wall Type A)

ELEV (FEET)	Min Top Cover (FEET)
5000 and Below	1'-6
Above 5000	2'-6



SECTION B-B
(Wall Type B)

GENERAL NOTES:
 Construction Specification - Arizona Department of Transportation Standard Specifications for Road and Bridge Construction, latest Edition, and ACI 530.1, Specifications for Masonry Structures.

Design Specifications - AASHTO LRFD Bridge Design Specifications, 8th Edition 2017.

Design:
 Soil weight = 120 pcf
 Backfill angle of internal friction = 33°
 Existing ground angle of internal friction = 30°

Masonry shall meet the Materials Notes requirements.

All block cells shall be filled with grout.

For wall surface treatment and type of block, see Project Plans.

All Concrete shall be Class "S" (f'c = 3000 psi).

Reinforcing steel shall conform to ASTM A615. All reinforcing shall be furnished as Grade 60.

All bends and hooks shall meet the requirements of AASHTO LRFD Article 5.10. All bend dimensions for reinforcing steel shall be out-to-out of bars. All placement dimensions for reinforcing steel shall be to center of bars unless noted otherwise.

All reinforcing steel shall have 2 inch clear cover unless noted otherwise.

Compact backfill for footing and wall base minimum 100 percent of ASTM D698 maximum dry density.

Dimensions shall not be scaled from drawings.

Pay item measure of square foot of wall constructed will be measured along the front face of the wall from top of footing to top of wall cap.

General Notes continued on SD 7.02 (2 of 2)

Item	RETAINING WALL (MASONRY CANTILEVER)
Item No.	9140179
Measure	Square Foot

Wall Height H	Wall Type	Footing Width W	* Reinforcing Steel					Factored Average Soil Bearing Pressure (psf)	
			Wall, Vertical		Footing				
			S1	S2	F2	T	F1		Y
3'-4 to 4'-0	A	3'-6	*4@16"	-	4-*4	*4@16"	-	-	1700
4'-4 to 5'-0	A	4'-0	*5@16"	-	4-*4	*4@16"	4-*4	*4@16"	1800
5'-4 to 6'-0	B	4'-6	*5@16"	*4@16"	4-*5	*4@16"	4-*5	*4@16"	1900
6'-4 to 7'-0	B	5'-0	*6@16"	*4@16"	4-*5	*5@16"	4-*5	*5@16"	2100
7'-4 to 8'-0	B	5'-6	*7@16"	*5@16"	4-*5	*6@16"	4-*5	*6@16"	2300

* Additional Reinforcement required at Control Joints.

STANDARDS ENGINEER
A. ALZUBI
 RECOMMENDED FOR APPROVAL
 GROUP MANAGER
D. EBERHART
 APPROVED
 STANDARDS COMMITTEE APPROVED FOR DISTRIBUTION 12/21 DATE

ARIZONA DEPARTMENT OF TRANSPORTATION
 INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
 BRIDGE GROUP STANDARD DRAWING

RETAINING WALL
 MASONRY CANTILEVER

DRAWING NO.
 SD 7.02
 (1 of 2)