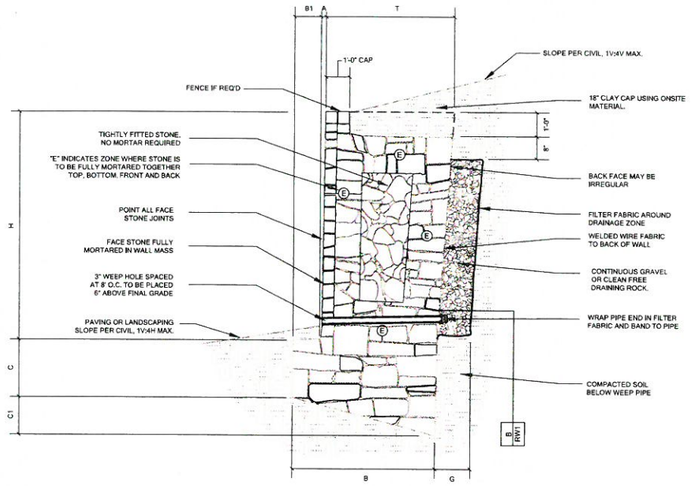
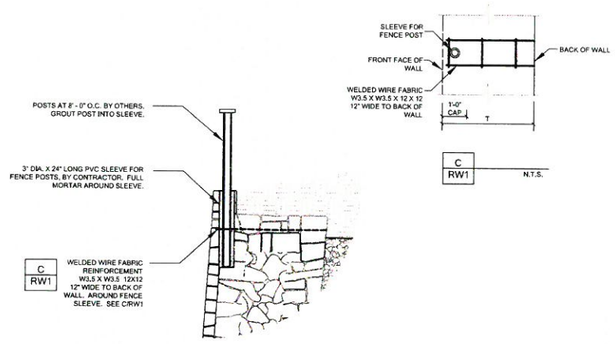


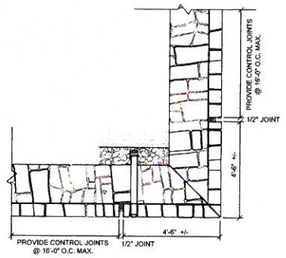
RW1/1 MASONRY WALL SCHEDULE - 3000 psf - VERTICAL BATTER								
BEARING CAPACITY ON NATURAL SOIL OR COMPACTED AND TESTED FILLS								
WALL HEIGHT	BASE WIDTH	TOE	BASE DEPTH (TOE)	BASE DEPTH (HEEL)	BATTER	FULLY MORTARED ZONE	THICKNESS OF WALL	DRAINAGE ZONE THICKNESS	BEARING CAPACITY
H	B	B1	C	C1	A	E	T	G	
1' - 0"	1' - 0"	0' - 0"	0' - 9"	0' - 2"	0' - 1/8"	FULLY	1' - 0"	SEE B/RW1	
2' - 0"	1' - 4"	0' - 1"	0' - 10"	0' - 3"	0' - 1/4"	FULLY	1' - 3"	SEE B/RW1	
3' - 0"	1' - 9"	0' - 2"	0' - 11"	0' - 4"	0' - 3/8"	FULLY	1' - 7"	SEE B/RW1	
4' - 0"	2' - 3"	0' - 3"	1' - 0"	0' - 5"	0' - 1/2"	FULLY	2' - 0"	SEE B/RW1	3000 psf
5' - 0"	2' - 9"	0' - 3"	1' - 3"	0' - 6"	0' - 5/8"	0' - 11"	2' - 6"	0' - 11"	
6' - 0"	3' - 4"	0' - 3"	1' - 6"	0' - 7"	0' - 3/4"	1' - 0"	3' - 1"	1' - 0"	
7' - 0"	3' - 10"	0' - 8"	1' - 9"	0' - 8"	0' - 7/8"	1' - 1"	3' - 2"	1' - 1"	

WALL DESIGN CRITERIA								
BEARING	SLOPE TOP	SLOPE BOT	ACTIVE PRESSURE	PASSIVE PRESSURE	COEFFICIENT OF FRICTION	SLOPE OF BACK OF WALL	SURCHARGE	
Q_a	β	β_1	ϕ_a	ϕ_p		α	q	
3000 psf	14.3 deg	14.3 deg	26 deg	26 deg	0.32	99.5 deg	0 psf	

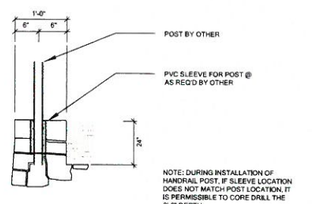
RW1/1 MASONRY RETAINING WALL W/ VERTICAL FACE
SCALE: N.T.S.



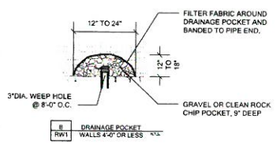
DETAIL OF WALL WITH WELDED WIRE
RW1/3 FABRIC FOR FENCE SLEEVE
SCALE: N.T.S.

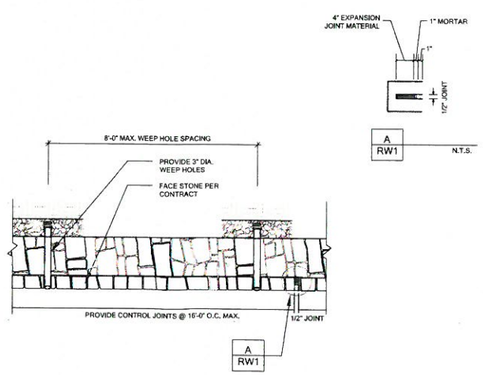


RW1/4 TYPICAL PLAN VIEW AT CORNER
SCALE: N.T.S.



RW1/2 WALL SECTION W/ FENCE POST
SCALE: N.T.S.





RW1/5 TYPICAL PLAN VIEW AT BASE
SCALE: N.T.S.

1. Design Building Code
International Building Code, 2015 Edition

2. Geotechnical Report
Firm: ECS TEXAS, LLP
Project No: 19:7098
Dated: April 17, 2017

3. Geotechnical Criteria
Bearing on Stiff Natural Undisturbed Clayey Soils or Compacted and Tested Soils
Allowable Bearing: 3000 psf, minimum bearing on compacted and tested soils or undisturbed cuts

Coefficient of friction at base of wall = 0.30
Backfill Soil Parameters:
Backfill Soil - Natural Clays or Fill Soils
Backfill Angle of Internal Friction PHI = 26 degrees

Base Soil Parameters:
Soil at Toe - natural, Undisturbed or Fill Soils
Angle of Internal Friction PHI = 26 degrees
The backfill soil angle of internal friction referred to above is a composite angle of internal friction and includes both cohesion and angle of internal friction of the soils.

The use of very wet or very dry backfill soil should be avoided. The use of heavy equipment within 3'-0" of the wall could damage the wall and should be avoided.

Locate base of walls on undisturbed or properly compacted soil.

4. Materials
Average density of masonry stone wall varies from 135 pcf to 145 pcf. Size of stone within wall varies from 4" to 18". Crushed concrete with or without rebar is acceptable to be used in the wall construction.

Drainage zone materials may be composed of clean gravel or stone ranging from 1" to 5". Crushed concrete is acceptable provided it is clean and generally free of dust or other deletrious materials.

Portland Cement Mortar for Retaining Wall Construction.

The Portland cement mortar used for construction of the above grade portion of the masonry stone retaining walls shall be provided with the following proportions per cubic yard of concrete. The Portland cement mortar supplier shall provide "batch tickets" clearly indicating that the appropriate amount of materials are provided in each concrete mixer truck load. The batch tickets shall clearly indicate the amount batched, the date, the project name and shall be provided to DirtSavers, LLC. for review, documentation, and file.

Contents	Amount per cubic yard
Type F Fly Ash:	94 lbs.
Fine Aggregate (sand):	3,250 lbs.
Potable Water:	235 lbs.
Type 1 Portland Cement:	376 lbs.
Admixture Eucon 100:	48 oz. average

Concrete retarders such as "Eucon 100 Retarder" may be used at the discretion of the masonry wall contractor. A greater amount of retarder (about 64 ounces) is typically used during hot periods and a less amount of retarder (about 32 ounces) is typically used during cool weather.

Please note that the above proportions will provide a Portland cement mortar with a compressive strength of about f'c = 2000 psi. DirtSavers, LLC. does not require any concrete testing provided the above proportions are verified by way of the "batch tickets".

5. Construction Reviews
DirtSavers, LLC. shall be called for construction review of masonry wall.

6. Retaining Wall Design Constraints
Retaining walls shall not have additional surcharge placed above the wall other than that shown on these plans.
Retaining walls shall not have slope at base or top of wall that exceeds that which is shown on these plans.
The retaining walls noted above require special design.

Minor variations in the construction of the retaining walls from these documents may be accepted at the discretion of the design engineer.

REVISION
OCT 11 2018
CITY OF ROCKWALL ENGINEERING DEPT.

RELEASED FOR CONSTRUCTION
ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.

Sarah Hoyer — 7-9-18
CITY — DATE

DIRTSAVERS
P.O. BOX 566
ALEDO, TX 76008
PH: 469.834.7446
F-14138

BEST WESTERN PLUS
MASONRY RETAINING WALLS
ROCKWALL, TEXAS

ERW SITE SOLUTION
FORT WORTH, TEXAS
ERW JOB NO. 18-1152

No.	Date	Item
		REVISIONS

DB: MAM CHK'D: MAM APP'D: MAM

STATE OF TEXAS
MICHAEL A. MARSHALL
110099
LICENSED PROFESSIONAL ENGINEER
10.03.2018

RETAINING WALL DETAILS AND NOTES

Project No.	RW100318-1
Date	10.03.2018
Last Revision	10.03.2018

RW1